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ISSUED QUARTERLY: OCTOBER, JANUARY, APRIL, JULY

SUBSCRIPTION PRICE \$3.00

PUBLICATION OFFICE: 450 AHNAP STREET, MENASHA, WIS.

EDITORIAL OFFICE: OFFICE OF ADMISSIONS, UNIVERSITY OF CHICAGO,
FIFTY-EIGHTH STREET AND ELLIS AVENUE, CHICAGO, ILL.

Entered as second-class matter at Menasha, Wisconsin, under the Act of August 24, 1912.



FRED L. KERR, 1937-38

Bulletin of The American Association of Collegiate Registrars

July
1937



Vol. XII
No. 4

The Analysis of Income and Expenditures of the University of Kentucky for the Year 1935-36

EZRA L GILLIS

History. This study was given first as a class assignment to two graduate students, Mr. McQuitty of Florida and Mr. Kent of North Dakota. Their report included a unit cost study of instruction at the University of Kentucky for the first semester of 1934-35. In evaluating the teaching load four units of measure were used: (1) Enrolments, (2) Student clock-hour, (3) Student credit-hour, and (4) Full-time student equivalent. It was apparent from the findings in their report that a more definite functional classification of the expenditures should be made.

The next year the same assignment was made to Mr. Croft of Kentucky and Miss Mathis of Florida. They classified all University expenditures for the half-year period on a functional basis. The most important of the findings in their report was the great variation in the cost of instruction on the different levels.

The problem of determining a weighted measure and of making the study on this basis was assigned to Miss Mathis.

With President McVey's approval the following were asked to serve as an advisory committee: Dr. Chamberlain, Head of the Department of Educational Administration, Dr. Ross, Specialist in Educational Statistics, Dr. Miner, Head of the Department of Psychology, and Mr. Peak, Business Agent of the University. The advisory committee and the deans of the colleges were called to hear the findings and to criticize each report.

The study has been further criticized by the members of the Research Club of the University and by the local chapter of the American Association of University Professors. An agreement was reached on all points presented in this paper, with the exception of one point. A Committee from the American Association of University Professors was inclined to think some of the things charged to instruction should have been charged to administration.

Purpose. It is the purpose of this study to analyze the sources of income and the expenditures, and to study unit costs at the University of Kentucky for the year 1935-36. In dealing with instructional costs certain units of measurement have been used to indicate the relationship between expenditures and teaching loads in the various colleges and departments. In this study the emphasis has been placed upon a functional classification of expenditures and upon a weighted measure for determining the cost of instruction on the different levels.

Procedure. Basic data which have been used are as follows: (1) Sources of income; (2) Expenditures; and (3) Students.

Sources of Income. The phase of the study which deals with the sources of income is based upon the total income received by the University during the year. This includes the incomes to the Agricultural Extension Fund and the Experiment Station Fund. The major part of the study deals only with the General Fund.

Expenditures. The expenditures are grouped in three major divisions: Agricultural Extension, Experiment Station, and the General Funds. An attempt has been made to arrive at a functional basis for the distribution of expenditures from the General Fund. The study of unit costs is limited to the expenditures which are classified under the heading "Instruction."

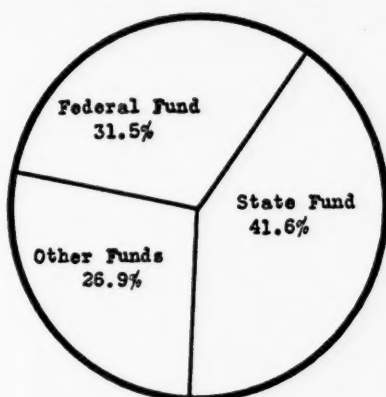
Students. The full-time student equivalent was unanimously agreed upon by the deans as the most satisfactory unit of measure in determining instructional salary costs.

SOURCES OF INCOME

*Sources of the Total Income of the University for
the Year 1935-36*

In a study of the finances of an institution one of the initial points of interest is the institution's source of income. The Business

FIG. 1. SOURCES OF THE ACTUAL TOTAL INCOME OF THE UNIVERSITY OF KENTUCKY FOR THE YEAR 1935-36 (Including the Extension Fund, the Experiment Station Fund, and the General Fund).



SOURCE		AMOUNT	PERCENTAGE
State Fund		\$964,596.21	41.6%
Federal Fund		730,231.40	31.5
Other Funds		624,769.23*	26.9
Dormitories	\$76,170.43 3.3%		
Other Fees (Ex. Sta.)	140,665.38 6.0%		
Sales (Ex. Sta.)	26,407.68 1.1%		
County and Others	61,815.69 2.7%		
Student Fees	319,710.05 13.8%		
Total		\$2,319,596.84	100.0%

* Income for Supplementary Business Activities, such as Commons, Post Office, and Cafeteria would increase this amount by \$52,293. Since no profit is received from these for the running expenses of the University they have not been included.

Office furnished a list of all incomes which had been received by the University of Kentucky during the year 1935-36. Figure 1 is a classification of the various sources from which the University has derived its income during this period. This classification includes

FIG. 2, 3, 4. SOURCES OF THE ACTUAL TOTAL INCOME OF THE THREE MAJOR DIVISIONS OF THE FUNDS OF THE UNIVERSITY OF KENTUCKY FOR THE YEAR 1935-36

FIG. 2. Agricultural Extension

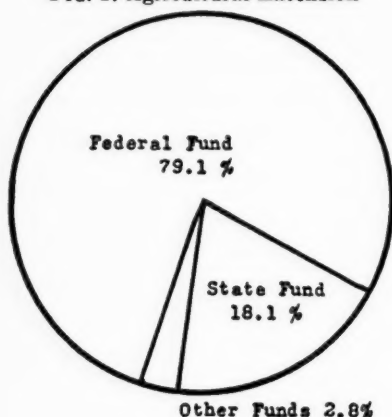


FIG. 3. Experiment Station

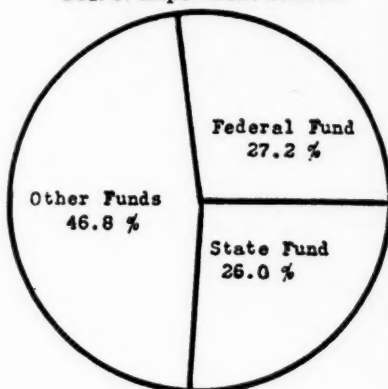
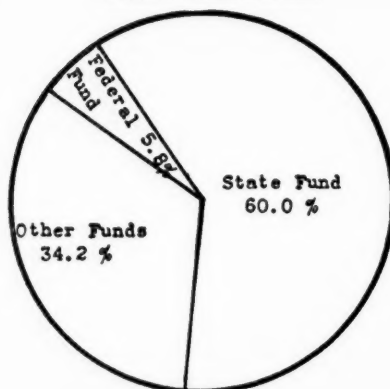


FIG. 4. General Fund



SOURCE	AGRICULTURAL EXTENSION		EXPERIMENT STATION		GENERAL	
	AMOUNT	%	AMOUNT	%	AMOUNT	%
State Fund	\$126,000.00	18.1	\$104,499.42	26.0	\$734,096.79	60.0
Federal Fund	549,050.89	79.1	109,734.51	27.2	71,446.00	5.8
Other Funds	19,475.62	2.8	188,145.57	46.8	417,148.04*	34.2
Total	\$694,526.51	100.0	\$402,379.50	100.0	\$1,222,690.83	100.0

* Income for Supplementary Business Activities, such as Commons, Post Office, and Cafeteria would increase this amount by \$52,293.

incomes to each of the three major funds. The total amount of income which has been received is \$2,319,596.84. It is of significance that the Federal Government contributes almost one-third of the total income of the University—31.5 per cent—while the State of Kentucky contributes slightly more than two-fifths, 41.6 per cent. These two agencies combined furnish 73.1 per cent of the total income, while other funds contribute 26.9 per cent.

*Sources of the Total Income of the Agricultural
Extension Fund*

Figure 2 shows the sources of the total income of the Agricultural Extension Fund for the year. The striking feature which is emphasized by this distribution is the large proportion of this fund which is granted by the Federal Government; 79.1 per cent. The State of Kentucky contributes 18.1 per cent. As its name implies, this fund makes possible the University's state extension program in agriculture and home economics. This service which the university renders the State is, however, financed largely by the Federal Government.

*Sources of the Total Income of the Experiment
Station Fund*

Figure 3 indicates the sources of the total income which has been received by the Experiment Station Fund during the year. In this instance it is seen that the State of Kentucky and the Federal Government assume practically equal responsibility for the promotion of this service which is performed by the University. The Federal Government contributes 27.2 per cent, the State 26.0 per cent, and other funds 46.8 per cent.

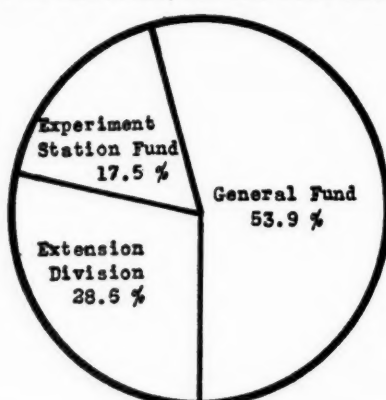
Sources of the Total Income of the General Fund

The sources of income of the General Fund of the University may be seen by reference to Figure 4. The General Fund may be described as that part of the University income which is devoted to carrying on the residence program of the University. The large share of this residence program is financed by the State of Kentucky, which contributes more than twice the amount that is derived from student fees. The State furnishes 60 per cent, the Federal Government 5.8 per cent, and other funds 34.2 per cent. Three fourths of the cost of instruction is borne by the State and the Federal Government.

Expenditures to the Three Major Divisions of the University

Figure 5 shows the expenditures to the three funds: the Agricultural Extension Fund, the Experiment Station Fund, and the General Fund. It is seen that the expenditures to the General Fund were slightly more than half of the total expenditures of the entire University. The General Fund expenditures were 53.9 per cent; the Experiment Station 17.5 per cent; Agricultural Extension 28.6 per cent.

FIG. 5. EXPENDITURES OF THE THREE MAJOR DIVISIONS OF THE UNIVERSITY OF KENTUCKY, FOR THE YEAR PERIOD 1935-36



DIVISION	AMOUNT	PERCENTAGE
General Fund	\$1,216,555.26*	53.9%
Experiment Station	395,844.98	17.5
Extension Division	646,330.24	28.6
Total	\$2,258,730.48	100.0

* Expenditures of Supplementary Business Activities, such as Commons, Post Office, and Cafeteria, would increase this amount by \$54,192.47.

While an analysis of the expenditures and services of the Agricultural Extension and Experiment Station Funds would each provide material for a thesis, it is our purpose in this study to deal only with the General Fund.

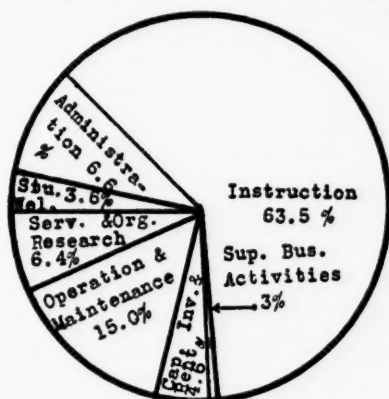
*Distribution of the Expenditures of the General Fund
According to Functional Classification*

Each item of expenditure of the General Fund was allocated under the classification which best described the function performed.

The items were distributed according to the following classifications:

- (1) Instruction, (2) General Administration, (3) Student Welfare, (4) Service and Organized Research, (5) Operation and Maintenance

FIG. 6. DISTRIBUTION OF THE EXPENDITURES OF THE GENERAL FUND OF THE UNIVERSITY OF KENTUCKY ACCORDING TO FUNCTIONAL CLASSIFICATION FOR THE YEAR 1935-36



CLASSIFICATION	GROSS EXPENDITURES		NET EXPENDITURES	
	AMOUNT	%	AMOUNT	%
Instruction	\$741,808.71	59.7	\$650,680.23	63.5†
General Administration	70,057.82	5.6	67,649.58	6.6
Student Welfare	37,246.24	3.0	36,746.24	3.6
Service and Organized Research	65,374.29	5.2	65,374.29	6.4
Operation and Maintenance	213,709.11	17.2	153,760.70	15.0
Capital Investments and Rentals	58,010.99*	4.7	46,608.43*	4.6
Supplementary Business Activity	56,774.97	4.6	2,757.61	.3
Total	\$1,242,982.13	100.0	\$1,023,577.08	100.0

* Additional expenditures for Amortization and W. P. A. would increase this amount by \$24,662.27.

† If limited to the instructional division of the University this would be 68.1%. See page 285.

nance, (6) Capital Investments and Rentals, and (7) Supplementary Business Activity. It will be seen that these classifications are rather general; for example, the expenditures for the various colleges, the administration of the Graduate School, and portions of the library

expenditures, etc. are considered as making up the general classification known as instruction. Though the heads of departments and deans of the colleges have administrative and supervisory duties,

TABLE 1. ALLOCATION OF GROSS EXPENDITURES
TO THE GENERAL FUND

I. GENERAL ADMINISTRATION	
1. †President's Office	6. Miscellaneous Expenses
2. †Business Office	7. Alumni Organization
3. Registrar's Office	8. Publicity Bureau
4. Board of Trustees	9. *Summer Session Adm.
5. Telephone and Telegraph	
II. INSTRUCTION	
1. Instructional cost of colleges including administration of graduate school	3. *Extension (Administration, corresp. inst., music ext., and adult education)
2. *Library (Salaries, supplies and equipment)	4. Gen. Educational Service
	5. Stenographic Bureau
	6. *Summer Session
III. OPERATION AND MAINTENANCE	
1. Insurance premiums	4. *Women's Halls (Operating, equipment replacement)
2. Buildings and Grounds	5. *Woman's Building
3. *Operating Men's Halls	
IV. SERVICE AND ORGANIZED RESEARCH	
1. *Vocational Education	6. Placement Bureau
2. Bureau School Service	7. *Extension (School Service and Vis. Aids, Woman's Club)
3. Bureau Government Research	8. Special Research Assignments (Leaves of absence)
4. Bureau Business Research	
5. Assigned Research (Emeritus professors)	
V. CAPITAL INVESTMENTS AND RENTALS	
1. *Library (Period. and News Ser., binding, books, furn. and fix.)	3. Service Building
2. *Men's Halls (Amortization)	4. Books and other capital outlay (Law Coll. Lib., Training School Library)
VI. STUDENT WELFARE	
1. *Hygiene and Public Health	4. Student Publications
2. Offices of Dean of Men and Dean of Women	5. *Woman's Bldg. (Salaries)
3. Y.M. and Y.W. Offices (Sal., Exp.)	6. Dean of Women (S. S.)
VII. SUPPLEMENTARY BUSINESS ACTIVITIES	
1. University Commons	3. *Residence Halls (Salaries)
2. Post Office (Net cost)	4. Training School Cafeteria

* A portion is charged to another division of the General Fund.

† Only that portion of the salaries which is paid by the General Fund is included in this distribution.

practically all the expenditures of the colleges were allocated to instruction. The table gives the distribution of the gross expenditures, but only the net expenditures are given in Figure 6.

Before the distribution of the net expenditures was made each classification was credited with all receipts with the exception of registration fees paid by students during the year. After receipts had been deducted the remaining expenditures were distributed according to the functional classification.

The expenditures for Instruction are 68.1 per cent of the net expenditures of the General Fund, if we omit the expenditures for Service and Organized Research, and Supplementary Business Activity. These expenditures are not for resident instruction and are not ordinarily attached to a college. If all expenditures are included instruction is 63.5 per cent of the total net expenditures of the General Fund.

Distribution of the Net Expenditures of the General Fund to the Various Divisions of Instruction

Figure 7 shows the net expenditures for the division of instruction. With the exception of the College of Law, approximately half of the work of the students in other colleges is done in the College of Arts and Sciences so that the expenditures for that college are 45.3 per cent of the total expended for instruction. The cost of graduate instruction is borne by all of the colleges of the University and a satisfactory measure of that cost invites a detailed study of the graduate loads of each of the colleges.

Distribution of the Net Expenditures of the Colleges

The table under Figure 8 indicates the distribution of the expenditures of the various colleges. While Figure 7 shows the distribution of the net expenditures of the entire classification designated as instruction, this table deals only with the net expenditures of the colleges.

Distribution of the Salary Expenditures of the Colleges

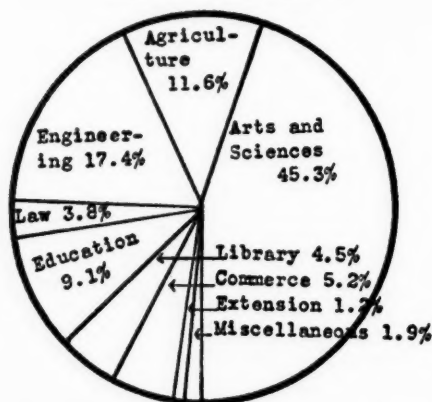
For this distribution the basis has been the total salary costs of the University. The salary cost of a college is the sum of the salaries of the instructors in the college and the salaries of the full-time clerical staff. Figure 8 shows the distribution of salary expenditures by colleges.

It is interesting to compare the college percentages on the two bases: net expenditures and salary expenditures. While great similarity between the percentage distribution on the two bases is seen for this year, if taken over a period of years it should be the same.

DISTRIBUTION OF THE INDIVIDUAL COLLEGE
TEACHING LOADS BY LEVELS
OF INSTRUCTION

Instruction at the University of Kentucky is on three levels: lower level, courses numbered below 100; middle level, courses numbered from 100 to 199; upper level, courses numbered 200 and

FIG. 7. DISTRIBUTION OF THE EXPENDITURES OF THE VARIOUS
DIVISIONS OF INSTRUCTION OF THE UNIVERSITY OF KENTUCKY
FOR THE YEAR 1935-36



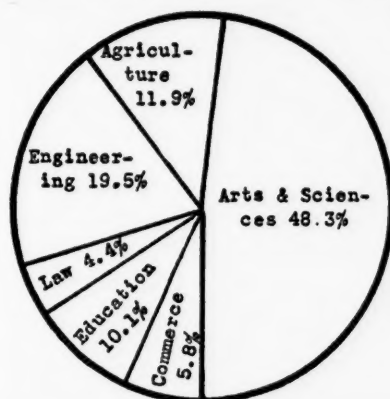
CLASSIFICATION	AMOUNT	PERCENTAGE
College of Arts and Sciences	\$295,370.21	45.3
College of Agriculture	72,022.33	11.6
College of Engineering	113,688.46	17.4
College of Law	25,010.86	3.8
College of Education	59,837.36	9.1
College of Commerce	34,085.78	5.2
Library	29,873.70	4.5
Extension Instruction	7,880.59	1.2
Miscellaneous (General Educational Service 1.1%; Graduate School 0.9%; Steno- graphic Bureau 0.9%)	12,910.94	1.9
Total	\$650,680.23	100.0

above. The lower level courses include junior-college courses and certain strictly senior-college courses—courses which are not open to either junior-college or graduate students.

The distribution of the individual college loads by levels of instruction for the regular session of 1935-36 and the summer session of 1935 is given in Figures 9 and 10. In the College of Arts and

Sciences the percentage of work on the two higher levels increased from 17.3 for the regular session to 51.9 for the summer session. In the College of Agriculture the increase on the middle level was from 28.5 per cent to 54.7 per cent. In the College of Engineering

FIG. 8. DISTRIBUTION OF THE EXPENDITURES TO THE COLLEGES OF THE UNIVERSITY OF KENTUCKY FOR THE YEAR 1935-36



COLLEGE	TOTAL EXPENDITURES		SALARY EXPENDITURES	
	AMOUNT	%	AMOUNT	%
Arts and Sciences	\$295,379.21	49.2	\$263,888.58	48.3
Agriculture	72,022.33	12.0	65,356.19	11.9
Engineering	113,688.46	18.9	106,456.77	19.5
Law	25,010.86	4.2	23,850.00	4.4
Education	59,837.36	10.0	55,126.44	10.1
Commerce	34,185.78	5.7	31,935.30	5.8
Total	\$600,015.00	100.0	\$546,613.28	100.0

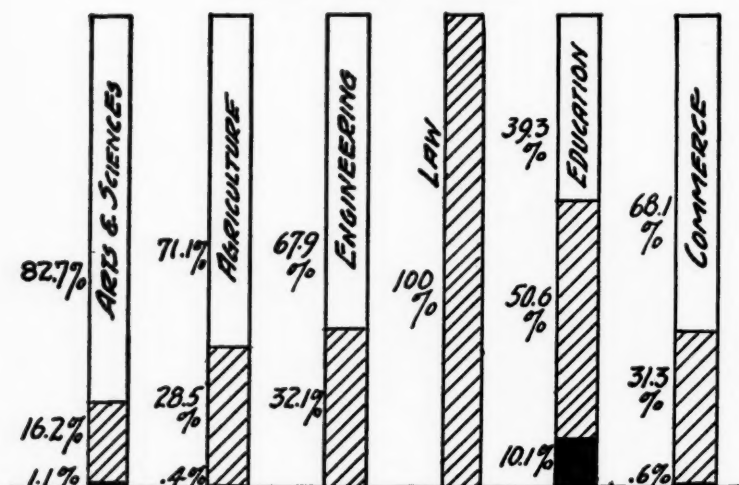
all work in the summer session was on the lower level. All work in the College of Law is on the middle level. In the College of Education the work on the two higher levels increased from 60.7 per cent to 88.6 per cent. In the College of Commerce the increase was from 31.9 per cent to 50.3 per cent.

*Periodic Distribution of the University Teaching
Load by Levels of Instruction*

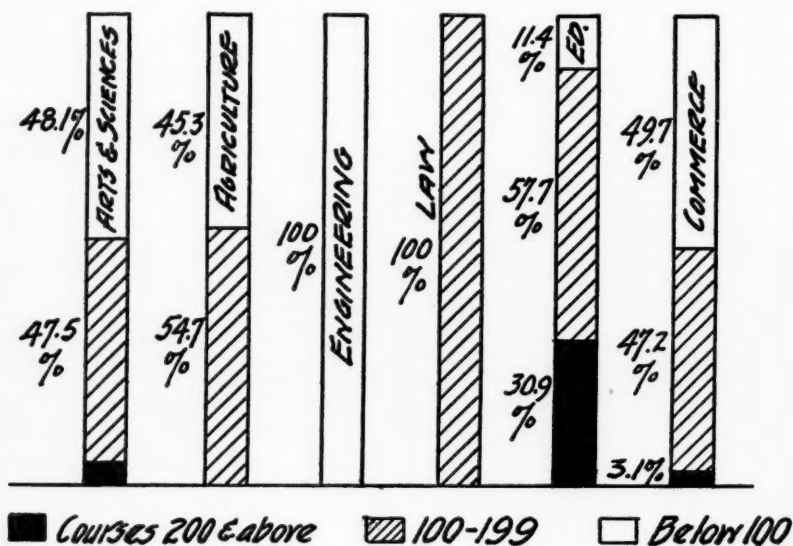
Figure 11 shows the distribution by levels of instruction of the total student credit-hours which were carried during the year 1935-

FIG. 9, 10. PERCENTAGE DISTRIBUTION OF STUDENT CREDIT-HOURS
BY LEVELS OF INSTRUCTION FOR THE COLLEGES OF THE
UNIVERSITY OF KENTUCKY THE REGULAR SESSION OF
1935-36 AND THE SUMMER SESSION OF 1935

REGULAR SESSION 1935-36

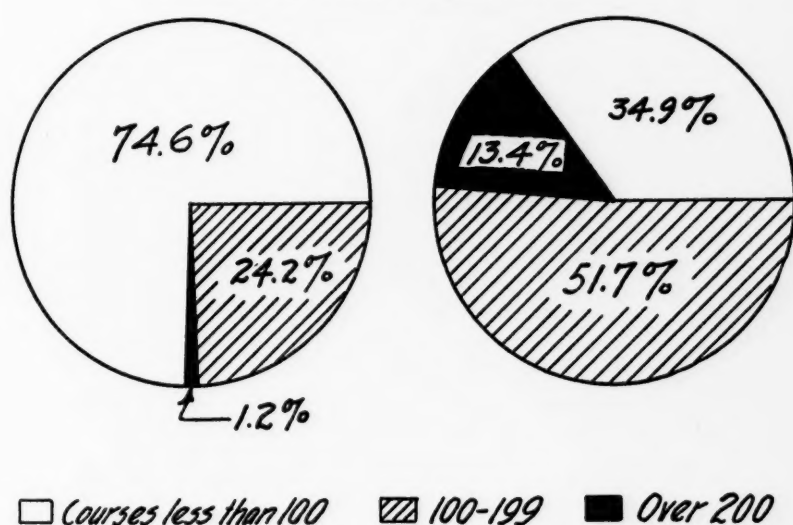


SUMMER SESSION 1935



36. The distribution for the summer session of 1935 is shown in Figure 12. Slightly less than three-fourths of the load of the University was on the lower level and one-fourth on the two upper levels during the regular session while in the summer session two-thirds of the load was on the senior-college and graduate levels and one-third on the lower level.

FIG. 11, 12. PERCENTAGE DISTRIBUTION OF TOTAL STUDENT CREDIT-HOURS BY LEVELS OF INSTRUCTION AT THE UNIVERSITY OF KENTUCKY FOR THE REGULAR YEAR 1935-36 AND THE SUMMER SESSION OF 1935



LEVEL OF INSTRUCTION	TEN-MONTH PERIOD	SUMMER SESSION
Below 100	74.6	34.9
100-199	24.2	51.7
200 and above	1.2	13.4
Total	100.0	100.0

A Weighted Measure of College Teaching Loads

It has been found in studying instructional costs that instruction on the advanced levels is more expensive per unit than instruction on the lower levels. Various reasons may be assigned for the variation in costs. This is due to small classes, higher salaries, independent

study courses, and to the time required for supervision of theses and dissertations, and individual conferences. Allen emphasizes the individual nature of graduate work in his statement concerning the "personal supervision which is supposed to be the essence of graduate work."¹

To determine a weighted measure, instructors who taught on all three levels were asked to distribute to these levels all the time, including preparation, supervision of theses and conferences, devoted to instruction. The percentage of time devoted to each level was multiplied by the salary to find the cost for that level. The total salary cost for each level was then divided by the number of full-time student equivalents on that level. The ratios of these unit costs was then found to be approximately 1:2:8 for the lower level, middle level, and the upper level respectively.

INSTRUCTIONAL SALARY COST PER FULL-TIME
STUDENT EQUIVALENT BY COLLEGES AND
BY DEPARTMENTS FOR FOUR
COLLEGES

In the study of comparative costs of instruction in the various colleges the instructional salary cost and the student load for the regular term was used. Figure 13 shows the instructional salary cost per full-time student equivalent for each of the colleges of the University. The range in cost was from \$94.62 to \$534.34. The average cost was \$167.50 per full-time student equivalent.

The instructional salary cost on the weighted basis is given in Figure 14. The range was from \$69.98 to \$404.55, the average being \$111.46.

Upon these two bases the rank in order was as follows:

<i>Unweighted Basis</i>		<i>Weighted Basis</i>	
College	Cost	College	Cost
Commerce	94.62	Commerce	69.98
Arts and Sciences	126.24	Law	88.62
Law	177.23	Arts and Sciences	102.23
Education	247.58	Education	111.46
Agriculture	349.39	Agriculture	266.67
Engineering	534.34	Engineering	404.55

On the weighted basis the College of Law became second in cost and the College of Arts and Sciences moved into third place. On

¹ William H. Allen. *Self-Surveys by Colleges and Universities*. World Book Company, Yonkers-on-Hudson, New York, 1917. p. 286.

the unweighted basis the cost in four colleges was above the average and two were below. However, when the weighted measure was used only two were above the average and four were below. The two colleges which were most affected by the weighted measure were the College of Law and the College of Education.

An important factor in determining unit costs is the ratio of students and instructors. As the number of full-time student equivalents per full-time instructor increases the unit cost decreases. The number of full-time students per instructor in the colleges in order are as follows:

<i>Unweighted Basis</i>		<i>Weighted Basis</i>	
College	Students per Instructor	College	Students per Instructor
Commerce	34.07	Commerce	46.06
Arts and Sciences	20.37	Law	40.44
Law	20.22	Education	33.75
Education	15.19	Arts and Sciences	25.16
Agriculture	8.89	Agriculture	11.64
Engineering	4.49	Engineering	5.93

In the College of Engineering, in which the ratio of full-time students to full-time instructors is small, the unit cost must necessarily be greater, than in the College of Commerce where the ratio of students to the instructors is greater.

The relation between the number of full-time student equivalents per full-time instructor and the unit cost may be seen by comparing Figures 13 and 15 with Figures 14 and 16.

It was found that the unit costs varied considerably for different departments within the same college. On the weighted basis this cost in the College of Arts and Sciences varied from \$54.33 per student in the Hygiene Department to \$210.46 in the Art Department. In fifteen of the departments the unit costs were below the average for the University. In the College of Agriculture this cost varied from \$106.67 in the Department of Agricultural Extension to \$341 in Farm Economics. Unit costs in nine of the ten departments were above the University average. In the College of Engineering unit costs in each department were above the University average. The range in cost was from \$263.03 in the Department of Civil and Architectural Engineering to \$1,262.70 in the Department of Practical Mechanics. In the College of Education the unit cost was less than the average University cost in five of the eight departments.

FIG. 13, 14. INSTRUCTIONAL SALARY COST PER FULL-TIME STUDENT EQUIVALENT BY COLLEGES, FOR THE REGULAR SESSION 1935-36

Fig. 13 Unweighted

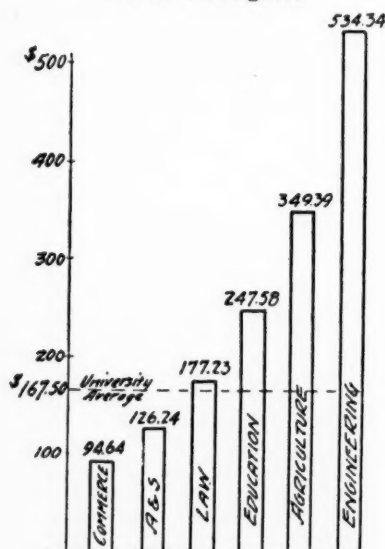


Fig. 14 Weighted

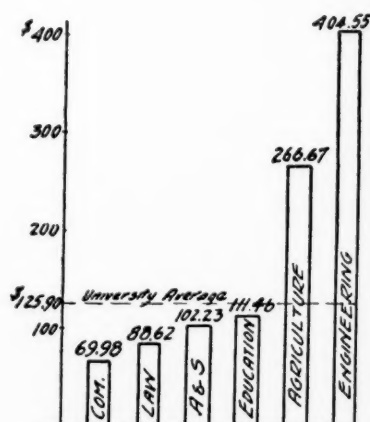


FIG. 15, 16. NUMBER OF FULL-TIME STUDENT EQUIVALENTS PER FULL-TIME INSTRUCTOR, BY COLLEGES, FOR THE REGULAR SESSION 1935-36

Fig. 15 Unweighted

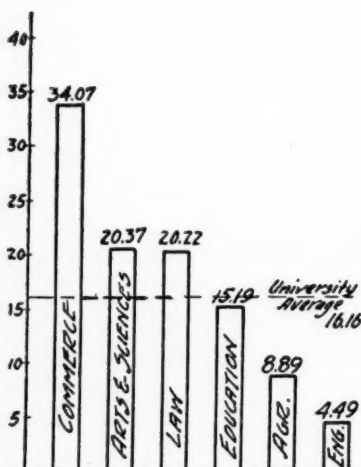


Fig. 16 Weighted

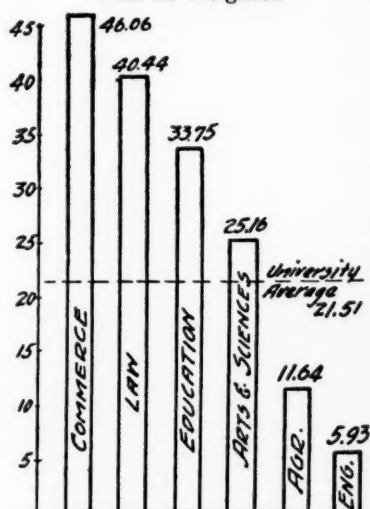
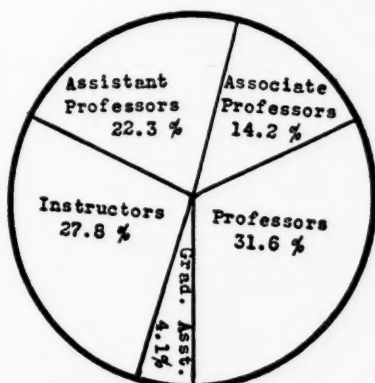


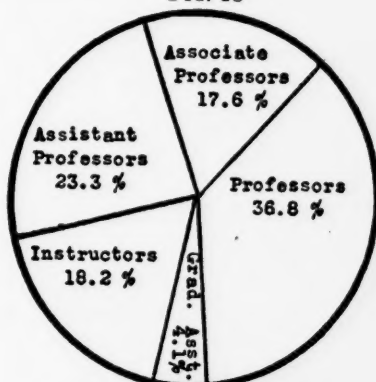
FIG. 17, 18, 19, 20. PERCENTAGE DISTRIBUTION OF THE TEACHING FACULTY, SALARIES, AND THE TEACHING LOAD ON THE UNWEIGHTED AND WEIGHTED BASES ACCORDING TO PROFESSORIAL RANK FOR THE TEN-MONTH PERIOD 1935-36

FIG. 17

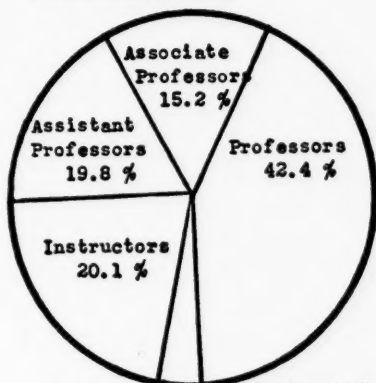


PROFESSORIAL RANK

FIG. 18

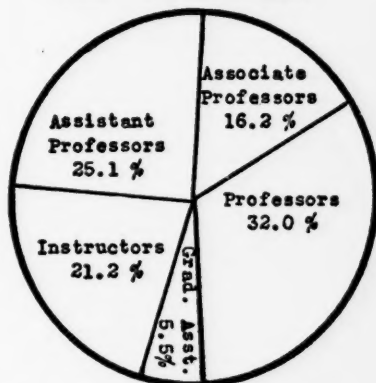


WORK - WEIGHTED BASIS



FUNDS

FIG. 19



WORK - UNWEIGHTED BASIS

FIG. 20

RANK	PER CENT OF FULL-TIME INSTRUCTORS	PER CENT OF SALARIES	PER CENT OF FULL-TIME STUDENT EQUIVALENTS	
			UNWEIGHTED	WEIGHTED
Professor	31.6	42.4	32.0	36.8
Associate Professor	14.2	15.2	16.2	17.6
Assistant Professor	22.3	19.8	25.1	23.3
Instructor	27.8	20.1	21.2	18.2
Graduate Assistant	4.1	2.5	5.5	4.1
Total	100.0	100.0	100.0	100.0

The cost ranged from \$46.05 in the Department of Administration to \$318.37 in the Department of Agricultural Education.

Distribution of the Teaching Faculty, Salaries, and the Teaching Load According to the Professorial Rank

The instructional staff (reduced to a full-time basis), the student load and the salaries were distributed according to professorial rank. These distributions are shown in Figures 17, 18, 19, and 20 respectively.

Those of the rank of assistant professor and above are members of the University Senate. They constitute 68.1 per cent of the faculty, receive 77.4 per cent of the salaries and do 77.7 per cent of the work on the weighted basis. This disproves the general impression on the campus that the instructors carry the heavier part of the work. They constitute 27.8 per cent of the staff and do 18.2 per cent of the work on the weighted basis and 21.2 per cent on the un-weighted basis. They receive 20.1 per cent of the salaries.

EXPLANATORY COMMENTS

In evaluating the teaching load the human element precludes the possibility of an exact measure. This may be seen from the following:

1. The weighted measure for evaluating the cost of instruction on the different levels is based on the assumption that all courses listed in a given group are of equal value. This may not be true in every instance.

2. The full-time student equivalent, one-eighth of the requirement for a degree, has been accepted as the most satisfactory measure for evaluating the teaching load. If this is not the best measure, we need to revise our definition of a credit. Some contend that laboratory work should be counted on the same basis as recitation.

3. The allocation of expenditures to functions which they serve seems to be a better basis for a comparative cost study than the departmental lines along which the budget was originally organized. It makes possible a unit cost study.

NOTE: In determining the comparative costs of colleges and departments we used instructional salaries as the basis. In limiting the study to a single year total costs of a department receiving a special appropriation for that year would give a distorted picture. If made over a period of years we could use total costs.

SUMMARY OF FINDINGS

Total Income. The total income of the University of Kentucky for the year 1935-36 was \$2,319,596.84; Agricultural Extension Fund, \$694,526.51; Experiment Station Fund, \$402,379.50; General Fund, \$1,222,690.83. The sources of income and the amount derived from each were as follows: State of Kentucky, \$964,596.21; Federal Government, \$730,231.40; and Other Funds, \$624,769.23.

Expenditures for Major Divisions. The total expenditures of the University during this same period were \$2,258,730.48: Agricultural Extension Fund, \$646,330.24; Experiment Station, \$395,844.98; General Fund, \$1,216,555.26. No further study was made of the expenditures of the Agricultural Extension and the Experiment Station Funds.

Expenditures for the General Fund. The total gross expenditures of the General Fund, \$1,270,703.40* were distributed according to a functional classification: Instruction, \$741,808.71; General Administration, \$70,057.82; Student Welfare, \$37,246.24; Service and Organized Research, \$65,374.29; Operation and Maintenance, \$213,709.11; Capital Investments and Rentals, \$58,010.99; Supplementary Business Activities, \$56,774.97. The total net expenditures for the General Fund were \$1,023,577.08.

The total net expenditures to "Instruction" were \$650,680.23: the six colleges, \$600,015; Library, \$29,873.70; Extension, \$7,880.59; Miscellaneous, \$12,910.94. Of the \$600,015 for the various colleges \$546,613.28 was for salaries: Arts and Sciences, \$263,888.58; Agriculture, \$65,356.19; Engineering \$106,456.77; Law, \$23,850; Education, \$55,126.44; Commerce, \$31,935.30.

It was found that about one-fourth of the General Fund is derived from student fees. According to this basis the student pays approximately one-fourth of the cost of his education. For every dollar the student pays other agencies provide three dollars. Omitting Service and Organized Research and Supplementary Business Activities, the student fees amount to approximately one-third of the cost of the division.

For the four colleges which seem to be comparable we have an average teaching load equivalent to 22 full time students to the instructor, or an average of 350 credit hours per instructor.

* Expenditures of Supplementary Business Activities, such as Commons, Post Office, and Cafeteria, are included in this amount but not in the amount given in the above paragraph.

THE TEACHING LOAD BY COLLEGES, DEPARTMENTS, AND INSTRUCTORS, COMPUTED ON THE FULL-TIME STUDENT EQUIVALENT, WEIGHTED AND UNWEIGHTED BASIS, FOR THE FIRST SEMESTER OF 1936-37

By Colleges

(An abridged statement made because of lack of space for the entire report)

COLLEGE	NUMBER OF FULL-TIME INSTRUCTORS	NO. OF FULL-TIME STUDENT EQUIV. PER FULL-TIME INSTRUCTOR		NUMBER OF FULL-TIME STUDENT EQUIVALENTS	
		UNWEIGHTED	WEIGHTED	UNWEIGHTED	WEIGHTED
A	117.51	19.71	24.48	2,316.48	2,876.83
B	22.13	10.02	12.69 (U)**	221.76	281.03
C	21.25	8.01	11.42 (U)	170.34	242.74
D	6.00	21.29	42.56	127.73	255.45
E	8.22	12.72	41.38	104.56	340.15
F	10.50	32.94	44.15	345.88	463.61

By Departments in College A

DEPARTMENT					
A	.50	18.14	24.18 (C)**	9.07	12.09
B	4.00	9.73	11.87 (CU)	38.93	47.49
C	3.43	11.69	22.29 (CU)	40.06	76.35
D	2.50	21.77	24.54	54.42	63.14
E	11.90	20.82	25.12	247.74	299.01
F	12.25	23.12	28.80	283.27	352.42

By Instructors

INSTRUCTOR	PROPORTION OF TIME CHARGED TO INSTRUCTION	NO. OF FULL-TIME STUD. EQUIV. PER FULL-TIME INSTRUCTOR	
		UNWEIGHTED	WEIGHTED
A	1.00	7.56	7.56 (CU)
B	1.00	17.83	19.65 (CU)
C	.75	53.67	59.96
D	1.00	19.53	40.94
E	1.00	25.13	27.78
F	1.00	20.34	24.63

Average teaching load for University—Unweighted, 17.71; Weighted 24.03.

Average teaching load for College A—Unweighted, 19.74; Weighted 24.54.

** C in parenthesis indicates below the average for the college; U indicates below the average for the University.

The average teaching load in the Colleges of Agriculture and Engineering is far below this. The Engineering College might be omitted from consideration. Due to the Engineering Building program, the Dean asked that we postpone a functional classification until next year. At present it is not comparable to the other colleges.

The high cost of instruction in the Agricultural College seems to be due to two causes: (1) Small enrolment for the faculty and the program. (The enrolment could be doubled without materially increasing the cost.) The plan of the Agricultural College seems to be to give the students a complete program without reference to the number enrolled. If the enrolment were increased 100 per cent it would still be more expensive than four of the colleges which seem to be on the same basis. This indicates that a larger proportion of the professors' salaries is charged to instruction than the time given to instruction would warrant. Instructors in Agriculture are for the most part members of the Experiment Station and Agricultural Extension staffs.

From the distribution of the teaching load according to professorial rank (See Figs. 17-20) we find that the instructors carry a lighter teaching load than those of higher rank.

It appears at the present time to cost at the University twice as much for work on the middle level as on the lower level, and eight times as much on the upper level as on the lower level.

The Anaemia of Orientation

CHARLES E. FRILEY AND HAROLD V. GASKILL

In the biological world *orientation* is interpreted as the change of position exhibited by various protoplasmic bodies within the cell, due to the agency of external influences, such as light and heat. Similarly, *anaemia* indicates a deficiency in the quantity of the blood or its constituents, occurring as a symptom or result of many conditions and disorders, or as a disease of obscure origin. Transferred to the academic world, these terms should lose none of their picturesqueness or pertinence; for here in the intellectual sphere can be found the counterpart or prototype of the protoplasmic body, the cell, the influences of light and heat, and definite symptoms of certain deficiencies in the educational blood stream. And our concern is with change and improvement.

A "blood count" examination of some of the programs of freshman orientation reveals a condition which we must reluctantly diagnose as anaemia. Fortunately very few situations are found in which the symptoms of pernicious anaemia are present, but general indications warn that copper, iron and milk must be prescribed for the milder cases; in some few cases the liver treatment is indicated. These symptoms are impressed upon us from many sources—notably from two extremes in the gradation of reconдите evaluation of educational philosophy. On the one hand, we overhear the sage advice of the undergraduate in full flower of sophomoric maturity when he deprecates the freshman's attendance at the orientation lectures. "Surely, my boy, you aren't taking orientation seriously?" And the freshman, hearing this, blushing and shamefacedly admits that he has attended in body, but not in spirit. At the other end of the intellectual scale writers in the field of educational theory attest to anaemic conditions. Symptoms singled out from this eminence are characterized by criticisms such as the following:

" . . . because the high school has coddled them the college continues the coddling process. Every jerk and shock must be eliminated; the students must be 'oriented'; they must be 'advised' as to what to 'take'; they must be vocationally guided. How is it possible to educate persons who will never be permitted to burn their fingers, who must be dexterously and expensively housed, first as freshmen, then as upper classmen, so as to make the right sort

of social connections and establish the right sort of social relationships, who are protected against risk as they would be protected against plague, and who, even though 'they work their way through,' have no conception of the effort required to develop intellectual sinew?"¹

These two illustrations are submitted as representative of the general critical attitude which became apparent after the development of orientation in the decade of the twenties. At the present time, no conclusion is warranted from statements such as these except the obvious conclusion that all of our educational offerings must be constantly scrutinized with a view to continual improvement. Such biased conceptions are out of place if they transcend the function of helpful criticism, because the need for orientation is much more acute now than it was in the twenties—and it will become more acute with the greater economic and social changes which we are facing.

Equally acute is the fundamental problem of the functioning of orientation. If the purpose of such statements is destructive criticism of attempts at orientation, or the substitution of Utopian adjustments, then such theories will be even less applicable in the next twenty years than they were in the first two and a half decades of this century. One is here reminded of Dean Gauss's statement regarding Utopian theories,—". . . As hardened college officials of today listen to the advocates of Utopian theories, they are reminded of a little passage at arms between Catherine the Great of Russia and the French philosopher, Diderot. Catherine was, without doubt, a tyrant; but nevertheless she was fond of the great liberal, and they got along famously—up to a certain point. During one of his visits to St. Petersburg he spent many hours with her in earnest discussion of the evils of tyranny and the incomparable advantages to be found in a frank acceptance of the rights of man. Catherine listened, entranced by the eloquence of her friend. At one point only she hesitated. Finally she said to him: 'Monsieur Diderot, you are a philosopher. With your theories one can make a very good book, but a very poor business. You write on paper, which suffers everything. But I, poor empress, must write on the human skin—which is far more irritable and ticklish.' Most college presidents and deans have one thing in common with the Empress Catherine: They

¹ Flexner, Abraham, *Universities American English German*, New York, 1930, Oxford University Press. Pp. x+381.

know many Diderots and they, too, have to write upon the human skin—upon the undergraduate's and upon his father's. Both of them, also, are highly irritable and ticklish."²

So, in treating the anaemia of orientation, the approach is clearly indicated: first, an examination of general goals, and second, consideration of the specific objectives and content of orientation efforts looking toward the achievement of complete functional status. The experimental approach is as indispensable here as it is in the intelligent and thorough study of any other academic problem.

The goals of orientation are inextricably bound up with or even synonymous with the goals of education. The idea of orientation can be traced from the medieval universities, where it was customary to conduct new students through a ritual of induction into the academic society, through the relic of barbarism known as "hazing," to the present noteworthy efforts to help the neophyte adjust himself to collegiate society; efforts which are being carried on today in eighty per cent of the colleges and universities of the country. Colleges setting as their standard the training of students to take an effective place in their environment after their college course is completed are of necessity concerned with the development of students in all the aspects of their being that will be brought into play in living a life. Thus orientation becomes a matter of personnel interest—as concerning the intellectual, moral, and physical improvement of the student. A possible source of anaemia is the attempt to achieve these goals in any one or two or three specific courses. Orientation, as such, must permeate the entire curriculum, it must be infused with and made an integral part of course work and life at college. Many contemporary studies of the Higher Learning in America omit the function of training men and women for life.

The problem of objectives and specific content of orientation courses must be approached experimentally. Orientation courses at the freshman level should be considered as the inauguration of the process, which is later to be continued by personnel efforts throughout the junior college and the senior college.

An examination of the content of courses and textbooks in use at the present time shows that there exists a wide range of opinion as to the kind of orientation which is judged to be effective. Two

² Gauss, Christian, *Life in College*, New York, 1931, Charles Scribner's Sons. Pp. xv+272.

main types are sufficiently prominent to permit a dichotomous classification. One serves as an introduction to the problems of civilization—contemporary civilization. In many instances this is called an introduction to the social sciences. The other is concerned with the more specific and highly personal adjustment problems of the student embarking upon a college career. Based upon the assumption that the typical freshman enters another world when he matriculates in college for the first time, this type of approach deals with problems of orientation to college life. Life goals and life values, methods of efficient study, and principles of mental hygiene characterize the content of this type of course.

Problems of present-day civilization are most acute; they are judged by some to be so tremendously important that their solution is a requisite for the future existence of civilization. Likewise, there is evidence that many college freshmen actually do enter another world when they start to college. Responsibilities change, the need for budgeting one's time arises for the first time in life, lectures are a completely new teaching technique, and methods of study must change—to mention only a few of the differences in the environment. Both types of orientation therefore have their special and distinctive merits.

It is increasingly evident that no single course in "contemporary civilization" or introductory course in the social sciences can attain this wider goal of orientation. This objective must be accomplished through efforts which permeate the curricular offerings. Viewed in such light, orientation becomes one of the major objectives of college education. On this point, however, it is recognized that there exists a wide difference of opinion.

What, then, should be the content of courses in orientation at the freshman level? The more personal and more immediate problems of adjustment stand out as significant upon experimental investigation. The first step, therefore, is to enumerate and investigate the adjustments which students are called upon to make.

It is appropriate at this point to cite a few studies of adjustments: Pressey's³ early attempt to discover actual adjustment problems of freshmen has proved most useful. She enumerates these in a publication in 1929,—*"Some College Students and Their Problems."*

The order of importance and frequency of occurrence of specific

³ Pressey, L. C., *Some College Students and Their Problems*, Columbus, 1929, Ohio State University Press. pp. vi+97.

adjustment problems provide an objective basis upon which to plan course content. At the outset, in inspecting adjustment problems for course content, it seems clear that a full course is indicated, rather than a few days' lectures, or an "orientation week." Two studies which indicate this conclusion are Miller's "The Induction and Adaptation of College Freshmen,"⁴ and Knode's "Orienting the Student in College."⁵

Reeves, Russell, Brumbaugh and others tabulate personal problems in thirty-five Methodist Colleges, involving 3,513 students, in order of frequency as follows: (1) finances (1,098 students, 31.3 per cent); (2) vocation; (3) forming acquaintance with opposite sex; (4) forming acquaintance with same sex; (5) fear of failure in courses; (6) poor study habits.⁶

Katz and Allport, investigating students at Syracuse University, list the problems in this order: (1) vocational; (2) fraternity; (3) college activities; (4) self expression in relation to the curriculum (choice); (5) personal ideals; (6) desire for personal advice.⁷

Emme, in a most thorough study, following seventy-three freshman through a year, finds problems in this order: (1) courses; (2) religion; (3) teachers; (4) economic; (5) use of library; (6) educational guidance and control.⁸

Emme's conclusions are most helpful, revealing a thorough analysis of the distribution of adjustment problems by areas of experience on the basis of intelligence, personality, and socio-economic status. Robison's study, "An Analysis of the Content of Orientation Courses for Freshmen in American Colleges and Universities," gives six major topics presented in orientation courses with greatest frequency in fifty-six educational institutions: (1) adjustment to college life; (2) intellectual adjustments; (3) social adjustment; (4) vocational adjustment; (5) health; (6) religion.

The S. P. E. E.'s Committee on Orientation of Freshmen, concludes that: (1) Any standardized program of orientation would be foolish; programs must be just as individual as the institutions them-

⁴ Miller, J. C., *The Induction and Adaptation of College Freshmen*, Columbia, 1930, Univ. of Missouri Bulletin, Vol. 31, No. 32.

⁵ Knode, J. C., *Orienting the Student in College*, New York, 1930, Bureau of Publication, Teachers College, Columbia University pp. vi+140.

⁶ Reeves, F. W., Russell, J. D., Brumbaugh, A. J., *The Liberal Arts College*, Chicago, 1932, Univ. of Chicago Press. Pp. xxxv+715.

⁷ Katz, D., and Allport, F., *Students' Attitudes*, Syracuse, 1931, The Craftsman Press. Pp. xxviii+408.

⁸ Emme, E. E., *The Adjustment Problems of College Freshmen*, Nashville, 1933, Cokesbury Press. Pp. 125.

selves. (2) Orientation should not be a "short course." (3) Orientation should not be too highly formalized. (4) The Counselor or Adviser System should constitute an important part of every well-organized program of orientation.⁹

Among our own studies, that of 1244 beginning students at Iowa State College in the fall of 1936 shows the most troublesome problems to be: (1) insufficient funds; (2) difficulty in budgeting time; (3) more work required than in high school; (4) slow reading habits; (5) difficulty in selecting fields of major study.

Studies such as have been mentioned must serve as a basis for determining the content of orientation at the freshman level. They have proved most useful in developing techniques, in eliminating irrelevant material, in emphasizing the importance of the individual approach, and above all in developing a satisfactory philosophy of orientation, which, stated in the simplest terms, is the process of determining bearings.

In the Division of Science at the Iowa State College there are three orientation courses in the freshman year, one in each quarter.

The first quarter's course involves three types of subject matter:

(1) Gross advice on adjustment problems in college. The term "gross" is here used as contrasted with specific critical treatment. Clinical treatment, when necessary, is given individually. May I add parenthetically that our results for 1935 and 1936 seem to indicate that large lecture groups, from 150 to 200 students, are equal if not superior to small groups of fifteen or twenty.

(2) How to study. In this section emphasis is placed on the fundamental skills which are necessary to success in college. This aspect of the courses involves budgeting time, reading effectively, note-taking and the use of notes, brief analysis of learning and remembering, attention and concentration, and reviewing, preparing for examinations and writing examinations.

(3) The use of the library. In this part of the course the student learns to use the card catalogue and to locate references.

The second quarter's course is made up of vocational information. The primary basis for this part of the work is carefully planned educational guidance and information which will help the students to choose a curriculum and to plan courses, rather than strictly vocational guidance. But the vocational aspect is stressed as a

⁹ Cf. Report of Committee on Orientation of Freshmen, Journ. of Engineering Educ., 1935, 26, 1, 120-134.

motivating device. Ten major fields within the sciences are covered at the class meetings, and each student is required to turn in job specifications, job requirements, possibilities for promotion and advancement, and the social accompaniments for a general field and for a specific field. The data for these papers are provided in the lectures and in selected readings in the library. It is believed that present-day guidance at the collegiate level should stress preparation for general fields as well as preparation for a specific job within a field. Economic changes are forcing this viewpoint. We are constantly on guard to consider each student as unique and as an individual; and to resist the temptation to give guidance "advice." Advice comes perilously close to coercion, which must be avoided.

The third quarter's course is a study of personality. The principal purpose of this course is to give the student an objective and scientifically sound explanation of personality in terms of personality variables such as intelligence, social adjustment, general characteristics of overt behavior, and physical characteristics. Just as the first step is to answer the question—What is personality?—so the second step is to indicate what personality is not. Popular but unsound explanations of character and personality are discounted; such as generalizations about facial characteristics and personality traits. Then some specific variables are illustrated, speech and posture lending themselves readily to illustration by means of speech records, motion picture analysis of posture, and check-lists for voice and speech. The third step is emphasis on the fact that personality traits can be changed. This of course must be illustrated by a brief analysis of measurement and use of the results of measurement. To make this concrete the entire group is given some standardized personality test, like the Allport Ascendance-Submission Reaction Study.

The underlying philosophy for the presentation of the aspects of personality which may be more specifically regarded as character may be stated as follows: The college student must realize that what he becomes twenty years after graduation will depend almost altogether upon how he takes advantage of every situation for self-improvement. So it is up to the student to make of himself what he *will*, not what he *may*. Every effort is made to get the student to realize that his development is in his own hands.

From this brief and incomplete description three conclusions may be offered: First, all approaches to the problems of orientation must

be purely objective and must be based on sound experimental techniques; second, the underlying philosophy, since it touches so many aspects of human welfare, both individual and social, must of necessity be complex; and third, the content must be flexible and adaptable, and must be constantly scrutinized with a view toward continual improvement.

Perhaps the greatest amount of anaemia has been brought about by over-zealousness in trying to adjust the new student. This over-zealousness has led to a departure from principles, and to the acceptance of the idea of actually *adjusting* the student. So, paradoxically, many of the orientation courses involve objectives, which are at once too broad and too narrow. A course which tries to consider all of the problems of contemporary civilization is too broad; minute and detailed descriptions for adjustment to dormitory life are too narrow. Instead of helping the student to learn broad principles upon which he can base choices, we have advised him directly what to do in a specific situation. This motive of orienting, adjusting, advising, has run beyond reasonable bounds and has approached (and in many cases has actually attained) a narrow and restricted specificity that may be set down as the chief cause of anaemia. There results then an insipid and uninspired set of directions, rules, admonitions, and we have orientation in the worst sense of the word.

Finally, the economic and social changes previously alluded to take on additional significance and complexity when we consider that the world is changed as much by our perception of it as we are changed by the world. In looking at the world and its problems, and in thinking about these problems in the light of orienting men and women toward life, our conclusions will have an anthropomorphic character. This is inevitable. But we must observe the world in the light of these perceptions—to help men and women adjust to life as it is lived. Little glimpses of life in the past remain very distinct, but immensely remote, as if seen through the wrong end of a telescope. Higher and higher in the waste basket reserved for useless formulas grows the debris of scrapped suggestions and collapsed Utopian idealism. Yet, with substantial experimental foundation, we are encouraged to hope for a brighter future. Orienting for a richer and fuller life is not hopelessly idealistic. To help the student understand and use principles in getting the most from life is a worthy and desirable objective of orientation in the complex academic world in which he finds himself.

The Present Situation in Intercollegiate Athletics

JOHN L. GRIFFITH

I have been asked to talk with you about the present situation in inter-collegiate athletics. When I say the present situation, what does that connote to you? Do you think of intercollegiate soccer or intercollegiate fencing or, perhaps, intercollegiate gymnastics? No, I dare say you immediately think of intercollegiate football, and I suspect that the problems most frequently arise as results of those games which are tremendously interesting and important.

It is a bit difficult to speak of college football to most audiences because it is a controversial question and most people accord the subject emotional rather than rational treatment. The registrars, however, have no prejudices, I am sure, either way, and we perhaps can approach the question from a rational standpoint.

I say it is difficult to discuss any controversial question or to deal with it scientifically. The scientist who has a problem collects all his data. He then studies them, not with the idea of proving a point but solely for the purpose of ascertaining the truth, and then, and then only, does he advance his conclusion.

A great many people do not take the trouble to accord football scientific treatment. Someone once said, "There are two kinds of people: those to whom their beliefs are more precious than the truth, and those to whom the truth is more precious than their beliefs," and, of course, from the second group have come all of the men and women who have made any worth while contribution to society.

The procedure should be to find the facts, study them dispassionately, and draw our conclusions.

One of the most interesting parts of my work consists of trying to get the facts. Some years ago a sports writer came into my office in Chicago and said, "Here is a story written by somebody down East in which the gentleman points out that while it costs only \$5,000 to put a horse in the Kentucky Derby, it costs \$50,000 to get a boy ready for a Yale-Harvard football game. Now," he said, "what I want to know is how much it costs to get a man in an important game in the Big Ten Conference."

I told him I didn't know but I thought we should know, so we made a budget analysis of the books in the ten universities and found the cost of coaching, of training, of everything, and, instead of being \$50,000, it was \$234.00.

If we could agree first on whether athletics has a legitimate place in the educational scheme and, if so, what that place is, the question would not be difficult.

The N. E. A. lists seven objectives with which you are familiar: Health, the Command of Fundamental Processes, Worthy Home Membership, Vocation, Citizenship, Worthy Use of Leisure Time, and Ethical Character. Proper training in play has something to do with at least four of them. I do not believe, however, that we can prove that if a boy has a fine course in athletics he has attained any of those objectives. Nor do I believe that we can say, "Here is a man who is a great banker. He studied Greek. He is a great banker because he studied Greek." Or, "Here is a man who has made a great success in his life and when he was in college he played football. He is a great man now because he played football." On the contrary I do not believe that we can say, "Here is a boy who has made a mess of his life and he played football. Therefore, it is because he played football."

In other words, you people may have a measuring stick for success but I have never learned of one. If the time comes when we can prove what these things really do to the student, that will be tremendously helpful.

If we do not have a measuring stick, then it seems to me the best way to try to get an answer is to ask the men who have had the experience what they think. I will grant that is just an opinion, it is not scientific, but we questioned 700 or 800 men who had won their letters at Minnesota:

"First, if you had it to do over again, would you spend as much time as you did in your intercollegiate athletics?"

Ninety-two or ninety-three per cent said "Yes."

"Secondly, would you want your son to go through the same experiences that you went through?" And 94 per cent said "Yes."

And when we asked them this question: "Do you think that your athletics developed in you desirable character traits?" And a little over 95 per cent of them were sure that they had.

Now, that does not prove that those men are right but I would rather take their evidence or their testimony than I would the testi-

mony of men who never had had the experience, and until we can get a measuring stick, I am content to leave the answer to this question with the men who have been through the experience.

The main athletic problems of the day, as I see it, are these: First, where does sovereignty reside, so far as athletics are concerned, in your college or university? Who, in other words, can hire or fire the football coach? That is the test of sovereignty. If a group on the outside has that power, then sovereignty does not reside in your institution; it is outside control; and I think one of our most serious problems today is the matter of trying to keep control in the hands of the educational authorities.

I think the football coach should be treated no differently than the professor of English or Chemistry or Biology. He should be hired or dismissed by the same group who hire these other instructors. That is a problem that worries me more than any other problem that we have, because the politicians are trying to get in on our athletics and they consider it a glorious thing if they can administer this sport that attracts so many people; and if they have power enough to dictate to the educational authorities, then your control of athletics in that institution passes out of the hands of the president and the faculty and the board of regents. If that continued, I think that would ultimately mean the end of our college athletics.

The second important and ever recurring problem is the one that has to do with competition for athletes. We call it subsidizing and recruiting. I prefer to call it competition for athletes, because our colleges are all competing for students. I don't mean that in the bad sense of the word. You issue your catalogs, you send out speakers and you tell your youngsters what a fine college you have, you try to sell them the idea that they should come to your institution, —perfectly legitimately; and, in the same way, there is a great deal of advertising for athletes that is legitimate. It ceases to be legitimate, in my judgment, when inducements are offered.

I feel that an athlete should be treated just as anyone else. If you have scholarships and he can qualify for a scholarship the same way that he might qualify if he were not an athlete, he should not be barred. If you have a loan fund from which he can borrow, not because he is a fullback but because he is deserving, I think that is fine. The difficulty, though, that we run into is this: We do not all define subsidizing in the same way. I have never found any man who was interested in college athletics who believes that we should buy

and sell our players the way they do in the big league baseball organizations.

I find in our group, however, that there is a vast difference of opinion as to where the line should be drawn. There are seventy-three college conferences in the United States. A conference is composed of a small, homogeneous group of institutions that are accustomed to play together. It is necessary to have rules, eligibility rules, to conserve the principle of equal competition, just as you have playing rules to make a good game. There should be a similar understanding of the kind of competition we will favor in this matter of encouraging athletes to come to the institutions in that conference. And then, if a conference agrees on those rules, the next point is to hope that we will have men of character who will play the game according to the rules that they have agreed to accept. That is where we come up against a very interesting phase of this whole athletic question.

I find men now and then who think that there is something wrong with the system; that evils inhere in athletics. They forget that the systems are administered by human beings and a system is just as good as the men who make up the system. If all of the men in a conference are fine sportsmen, who would not deign to take advantage of another by cheating here and there, the system will be all right. But if there are some men who will cheat a little, get an edge here and then find a fine argument explaining why they were doing this in the interests of the poor boys, we won't get very far in the matter of conserving equal competition from the standpoint of inducing good athletes to come to our institutions. The vital thing is the factor of human nature.

It is very easy to deal with all problems in their generalities, and I think that our problem has received that kind of treatment very often. In fact, I have a notion that the 15 per cent of bad in our college athletics has been vastly over-emphasized.

President Little in his inaugural address at Michigan some years ago said, "Eighty thousand people will come out to see an 18-year old boy with sturdy legs and clear eyes as he runs through a broken field for a touchdown, and less than one hundred will come out to hear the world's greatest living authority on the origin of atoms. It isn't right and it isn't just, but it is human nature, and very often those who object are animated by a feeling of envy and jealousy."

The point I am trying to leave with you is this, that we can find only bad in the school or the church or in athletics if that is all we look for, or we can find more good, I am sure, if we will look for the good; and I am not sure but that those who try to conserve the good that exists, to expand the good, do more good than those who are interested only in fighting evil.

Perhaps we need to talk a little more about the good in education and religion and athletics and not leave the discussion entirely to the destructive critics.

PRESIDENT SAGE: We appreciate your message very much, Mr. Griffith.

We have a few minutes now for a discussion of these addresses. I am sure that several of you have questions that you would like to ask of one or more of these speakers, so we will take a little time now for discussion.

MR. SMITH: I wonder if Mr. Griffith would comment on the action of the North Central Association taken last Saturday relative to the Code of Ethics for recruiting.

MR. GRIFFITH: Yes. I think that was a very good code. The athlete should be entitled to the same kind of help a non-athlete has, but he shouldn't be treated as a member of a preferred class. What Stradley and those men are trying to get at, of course, is the idea that we don't want to maintain stables of gladiators who will just go out and perform on Saturday for old alma mater. I think that those men have a very sane approach and they have gone into it very carefully. I am sorry they didn't give us some specific items. They made a rather sweeping statement which I have a notion is substantially true, that there is a little more recruiting and subsidizing today than there was previously.

One of our universities in the Conference a few years ago awarded scholarships to 10 per cent of the male undergraduates. The figure last year was 34 per cent. That is, during the depression there have been more students helped and the percentage helped has been accordingly increased. There isn't any question about it, in my mind. And I think, too, that our boys are getting an idea a little more and more that somebody owes them a living.

A Neglected Consideration in Grading Systems

CONRAD VANDERVELDE

What purposes do grades and grading systems serve? Primarily, they indicate to the student, to the parent, and to institutions to which credits may be transferred, the quality of work the student has done in any course. Secondly, they are the means by which an instructor can show whether, in his judgment, a student has acquired sufficient information or developed sufficient skill to enable him with profit to take the next course in the sequence; they indicate to the student the quality of his work, and may stimulate him to greater effort; they are a source of information for employers in the selection of applicants for positions.

It has long been recognized that grades are not very accurate measures or indices of achievement because of the variation in the standards of those who use them. The question as to what can be done to make grades mean something definite has been for some time of concern to registrars and teachers.

When I was a student in college it was a well known fact that certain teachers gave high marks for work which would receive low ratings at the hands of other instructors. It was also generally believed that if one wished to secure honors at graduation it was well to avoid certain departments and to elect work under certain other easy and high marking instructors.

Ten years later when I was given administrative responsibility in a college I found there were established traditions or beliefs in the institution that certain teachers were "snaps," some were regarded as "high graders," and that in certain departments it was not possible to secure graduation honors in competition with the students who were majoring in the "high grading" and "snap" departments. We cannot go into the question of the truth of these traditions, except to say that "the children of this world are wiser in their generation than the children of light"!

On the basis of these campus opinions a study was made of the distribution of grades of the several instructors. The system then in use was a percentage system with grades ranging from 100% to 70% for passing. It was found that some instructors gave nearly all

students grades in the 90's, while the hard-boiled ones seemed generous with 70's and stingy with 80's and 90's.

Such a wide variation existed—a variation which seemed not to be justified by differences in the actual achievements of students in the several departments—that the faculty adopted a new system to produce greater uniformity. The system which was described by our registrar to this group some years ago requires that each member of the faculty divide the students under his instruction into four equal groups on the basis of the quality of work done in all his courses. To the highest group the rank of "1" is given, to the next group a rank of "2," to the next a "3," and to the lowest group a "4." This system was preferred to that of the probability curve because of its simplicity. The same principle underlies both systems in its bearing on grading, viz., groups are more uniform than the individual judgments of the members of the faculty, and a fixed distribution produces more accurate results than absolute freedom of the individual in the assignment of grades.

Since 1920 when the new system was inaugurated it has twice been under fire and changes considered. Both times the faculty voted to retain it, not because it is perfect, but because it is the best system available. The attacks upon the system both times came from the new members of the faculty, the generation of those who knew not Joseph. It must also be observed that most of those who opposed the system of division, viz. 25%-25%-25%-25%, on the ground that it does not provide enough high grades are known as the "easy shots." The claim that there were not enough high grades because of the superior enrollment in the department led to the investigation I am about to report.

Two questions emerged in the consideration of the system. These questions arise also in connection with the probability curve distribution. First, is there a difference in the quality of student attracted to various courses, departments, and instructors? Second, if the quality of student differs from instructor to instructor, will not a fixed assignment of distribution of grades for all instructors fail to secure the essential uniformity and definiteness in the meaning of grades? A third question emerged as the study proceeded: cannot a distribution curve be devised for each instructor which will be fairer to all students and more scientific than a general probability curve distribution for all instructors? In other words ought we not to have an "individual probability" curve or index for each instructor?

QUALITY OF STUDENT AND THE INSTRUCTOR

How can the quality of the student enrollment under a given instructor be determined? There are two measures available: the intelligence test score made in the intelligence test given in the freshman year on entrance to college, and the scholastic achievement or record based on the average grade of each student in all courses taken the preceding semester.

The students in each college class (freshman, sophomore, junior, and senior) were divided into quartiles on the basis of the intelligence test given them as freshmen. These four groups and the individuals in them were given respectively the ranks 1, 2, 3, 4, from the highest to the lowest. They were also divided into quartiles on the basis of average grades secured in all work taken the preceding semester and given ranks of 1, 2, 3, and 4 respectively from highest to lowest in grades or scholastic achievement.

The enrollment in each course and under each instructor was then distributed into the four groups on the basis of intelligence and scholastic achievement. For example, in a small class in physics one semester, were found 5 students who belonged to the upper quartile in intelligence, 3 students in the 3rd quartile, 1 student in the 2nd quartile, and 1 student in the lowest quartile. In other words when translated into percentages 50% of the students in the course were from the upper quartile in intelligence, 30% in the 3rd quartile, 10% each in the 2nd and in the lowest quartile. On the basis of scholastic achievement or average grades for the preceding semester, 4 students were from each of the upper two quartiles—highest and 3rd, and 2 students from the 2nd quartile and none from the lowest quartile. This in terms of percentages gave 40%-40%-20%-00% in the four quartiles from the highest to the lowest. The percentages for all students in all courses under one instructor were grouped. The study was carried on for six semesters and the results of five of these semesters are given in Chart I.

You will note that under instructor D 37% of the students were from the highest quartile in intelligence, and only 17% were from the lowest quartile. On the basis of grades 31% of the students under this instructor belonged to the highest quartile and 17% from the lowest quartile, with the other per cents under the 3rd and 2nd quartiles. Practically two-thirds of D's students for the period were from the upper one-half of the student body on the basis of intelligence, and three-fifths of the students were from the upper one-half on the basis of grades. On the other hand two-thirds of the students

CHART I

Key to Chart

Under intelligence read: In all classes under Instructor B for the period 1930-31 1931-32, and the first semester 1932-33,

20% were from the lowest quartile.

24% were in the 2nd quartile

25% were in the 3rd quartile and

30% of the students were in the upper quartile in intelligence.

(Fresh. intelligence test.)

Under grades read

20% averaged in the lowest quartile.

25% averaged in the 2nd quartile

30% averaged in the 3rd quartile and

25% of all students in the department for the period indicated averaged in all courses pursued for the semester under consideration in the upper quartile of their class. (Freshman, Sophomore, Junior, Senior.)

Instructor	Intelligence				Grades			
A	21	24	26	29	21	27	27	26
B	20	24	25	30	20	25	30	25
C	20	19	28	33	27	22	23	27
D	17	18	28	37	17	23	29	31
F	9	22	26	42	15	17	25	42
G	13	13	28	48*	15	19	31	37*
H	13	26	22	40	28	22	18	31
I	15	18	29	39	21	23	27	29
J	37	30	22	11	39	27	20	14
K	27	28	25	20	17	20	38	25
L	31	26	25	18	42	28	15	15
M	31	28	17	21	22	26	22	29
N	14	26	26	34	20	25	26	28
O	27	26	25	22	30	30	20	20
P	21	24	24	32	28	26	20	26
Q	15	27	22	36	26	29	22	23
R	23	19	29	26	21	23	31	24
T	32	32	13	21*	6	28	48	16*
U	28	28	14	28*	14	28	28	24*
V	24	24	24	24*	8	9	42	9*
W	22	19	27	32*	7	35	32	25*
X	34	17	34	17*	34	8	17	42*
Y	31	31	18	19*	37	33	18	12*

* Does not include all the semesters covered by the study as a whole but is fairly representative of the tendency.

under Instructor J, both in intelligence and in grades were from the lower one-half. It is quite apparent that the enrollment under the several instructors differs decidedly in quality.

VARIATION IN QUALITY OF ENROLLMENT FROM SEMESTER TO SEMESTER UNDER GIVEN INSTRUCTORS, AND FROM INSTRUCTOR TO INSTRUCTOR

Thinking that perhaps an instructor might in the long run draw a certain quality of student and yet vary so greatly from semester to semester that the variation would nullify any long period tend-

ency in practice, I carried the study out for all the members of the faculty through each semester included in the years 1933-1937. I selected from this material the data for six members of the faculty whose records were practically complete and comparable for these semesters. I could not use the members of the faculty who were here only during a part of the period. I selected the scholastic achievement or grades as the basis of quality in this study. The results are found in Chart II. This chart shows considerable variation from

CHART II

The distribution of students by quartiles on the basis of their average grades made in all courses during the preceding semester.

First column, lowest quartile; second column, second quartile; third column, third quartile; fourth column, highest quartile.

Instructor D					Instructor J				
1st sem. 1930-31	7	15	36	40	1st sem. 1930-31	45	22	22	9
2nd sem. 1930-31	10	28	30	32	2nd sem. 1930-31	31	34	24	10
1st sem. 1931-32	17	25	34	32	1st sem. 1931-32	42	24	15	15
1st sem. 1934-35	18	22	37	22	1st sem. 1934-35	39	34	15	10
2nd sem. 1934-35	12	19	38	29	2nd sem. 1934-35	28	28	18	23
1st sem. 1935-36	11	25	25	38	1st sem. 1935-36	19	30	28	21
2nd sem. 1935-36	11	13	28	46	2nd sem. 1935-36	33	20	25	19
1st sem. 1936-37	10	20	30	40	1st sem. 1936-37	33	35	15	15
2nd sem. 1936-37	17	20	28	33	2nd sem. 1936-37	37	17	30	14
Instructor H					Instructor N				
1st sem. 1930-31	25	19	18	38	1st sem. 1930-31	21	22	29	26
2nd sem. 1930-31	27	22	15	35	2nd sem. 1930-31	19	18	28	34
1st sem. 1931-32	24	26	24	24	1st sem. 1931-32	23	28	27	20
1st sem. 1934-35	33	11	38	22	1st sem. 1934-35	28	14	28	28
2nd sem. 1934-35	17	19	19	46	2nd sem. 1934-35	20	31	20	27
1st sem. 1935-36	14	29	19	35	1st sem. 1935-36				
2nd sem. 1935-36	13	29	14	43	2nd sem. 1935-36	20	24	26	28
1st sem. 1936-37	3	20	24	51	1st sem. 1936-37	10	35	25	28
2nd sem. 1936-37	13	30	25	30	2nd sem. 1936-37	28	20	20	31
Instructor I					Instructor O				
1st sem. 1930-31	20	21	29	28	1st sem. 1930-31	27	31	22	18
2nd sem. 1930-31	22	15	25	35	2nd sem. 1930-31	27	31	22	13
1st sem. 1931-32	20	25	23	31	1st sem. 1931-32	36	26	18	18
1st sem. 1934-35	25	27	22	24	1st sem. 1934-35	43	24	19	14
2nd sem. 1934-35	11	20	34	34	2nd sem. 1934-35	30	25	23	20
1st sem. 1935-36	17	24	26	32	1st sem. 1935-36	23	24	30	21
2nd sem. 1935-36	12	24	30	34	2nd sem. 1936-37	29	27	23	19
1st sem. 1936-37	13	11	48	27	1st sem. 1936-37	20	25	32	21
2nd sem. 1936-37	15	27	21	36	2nd sem. 1936-37				

semester to semester in the quality of students under a given instructor. I then took the average per cent of each of the quartiles under a given instructor to find out how much an instructor varied from his own average, semester by semester, for the nine semesters listed. The results are found in Chart III, the right hand column and under "(upper)."

Then I determined by the same procedure the average deviation in quality of student under a given instructor from the requirements of our system, viz., 25%-25%-25%-25%. The results are found in Chart III, the right hand column and under "(middle)."

Then I determined the average deviation from each other in the quality enrolled under the six instructors. The results are under "(lower)" in the right hand column of Chart III.

CHART III

a.					b.				
Average distribution or the quality of students for nine (eight*) semesters under each of 6 instructors for whom continuous records are available.					(upper Average deviation for the period (nine semesters) of each instructor from himself.				
First column, lowest quartile; second column, second quartile; third column, third quartile; fourth column, highest quartile.					(middle) Average deviation for each instructor from the requirements of the system.				
					(lower) Average deviation for each instructor from all the other instructors.				
Instructor D	12	20	30	34	(upper)	3.0	3.6	4.0	5.5
					(middle)	12.4	5.0	5.8	10.4
					(lower)	11.8	8.0	6.6	12.8
Instructor H	18	22	21	36	(upper)	7.4	5.2	5.2	7.0
					(middle)	8.4	5.3	5.0	12.0
					(lower)	7.4	2.8	4.6	11.0
Instructor I	17	21	28	31	(upper)	3.4	4.3	5.7	3.3
					(middle)	7.7	4.3	5.6	6.4
					(lower)	7.6	3.2	5.0	8.2
Instructor J	34	27	20	15	(upper)	6.0	5.3	5.1	3.9
					(middle)	10.2	6.0	5.4	9.8
					(lower)	14.6	3.2	5.4	14.2
Instructor N	21	24	25	27	(upper)	3.8	5.0	2.8	2.7
					(middle)	4.7	5.1	2.5	3.5
					(lower)	7.4	2.8	3.8	8.2
Instructor O	29	26	23	18	(upper)	5.1	2.1	3.3	2.8
					(middle)	9.2	2.1	3.3	7.0
					(lower)	10.6	3.6	3.8	11.8
Total for all six					(upper)	4.8	4.2	4.3	4.2
					(middle)	8.7	4.6	4.6	8.2
					(lower)	9.9	3.9	4.8	11.1

CONCLUSIONS

1. The quality of student under the several instructors on the basis both of intelligence and scholastic achievement differs greatly.
2. The quality of student under a given instructor varies from semester to semester less than the quality of student varies among the several instructors.
3. The quality of student under a given instructor varies less from semester to semester than the quality of student varies from the standard requirement, 25%-25%-25%-25%, and presumably,

if the probability curve of distribution were used, from such requirements also.

4. The standard of distribution of grades should be based upon the quality of student graded by a given grader.

5. A "more just" standard of distribution would be an "individual instructor distribution curve" based upon the record of a period of time which shows what quality of student he draws to his courses.

REMARKS

I have studied the time required for the calculation of such an index for each instructor each semester. I find this can be done at about the rate of one student in two minutes in a small institution by an able secretary with a good memory. In larger institutions, where an intimate acquaintance with each student is not possible and where in the division of students the quartile rating of each student must be secured from a rating sheet instead of largely from memory, it would take longer. However, some of this work is being done in other connections and this would not need to be duplicated.

The above study, it must be understood, was carried on in an institution with an average of about 400 students. The advanced and the lower divisions are carried by each of the instructors about equally. The departments and the courses taught are such as are usually given in a liberal arts college with about three-fourths of the courses elective within the limits of the choice of majors, etc. The college offers about five times as many hours as any one student can take in four years.

It is recognized that there might be serious difficulty in securing consent to such a system by members of the faculty, but what good or bad system does not encounter such difficulty?

The system proposed is a step beyond the probability curve in the direction, we believe, of more definite and more uniform meaning of grade symbols.

Potentialities of the New Test Scoring Machine in the Field of Educational and Vocational Guidance

E. C. SCHROEDEL

It is a very particular pleasure to have the privilege of addressing you on the subject of the International Test Scoring Machine and its potentialities in the field of educational and vocational guidance.

Educational projects are not new to us. Mr. Thomas J. Watson, President of International Business Machines Corporation, who is a trustee of several institutions of higher education, has always been actively interested in education, believing that it is the ultimate and basic problem of society. Mr. Watson has always made the most advanced type of educational program a definite company policy. This policy was climaxed in the erection of our beautiful quarter-of-a-million-dollar school house dedicated exclusively to education.

The school is equipped with every modern educational convenience. The enrollment, which averages about 1500 students at all times, comes from our factory and field organizations in seventy-nine different countries of the world. Beyond the broad courses in the applications and uses of our hundreds of products, such courses as blue print reading, shop mathematics, electricity, motion study, measuring instruments, English, accounting, industrial relations, etc., are offered.

Our personnel in sales and mechanical service organization all attend school for periods varying from two months to a year, and the credits required for a diploma are very exacting. Aptitude tests at entrance, and achievement tests during and at the close of the school session are a part of standard procedure. Consequently, we were in a particularly good position to appreciate the need of an instrument for scoring the results of both achievement and aptitude types of objective tests and arriving at aggregate averages of scholastic achievement measures.

For the past ten years or more, Dr. Ben Wood, Professor of Collegiate Educational Research at Columbia University, has been fostering and studying the program of guidance with a view to interpreting individual differences. One of the most important phases of this program was that of objective testing.

With the progress of this important movement Dr. Wood, due to his close contact with educators and their needs, was quick to realize that the need for speed and accuracy in providing raw scores in this type of test was most essential, and over five years ago he and Dr. W. S. Learned, of the Carnegie Foundation, approached Mr. Watson on this basis; that educators in general had no enormous laboratories or technicians at their disposal and had no means of providing money for experimental research in the development of the machine which would handle the various problems they had in mind. Because of his interest in education and because he could envision future possibilities of such a machine, Mr. Watson was very susceptible and instructed our laboratories to go to work on this problem. Two years of careful research and development indicated to us that the photo-electric cell principle was not feasible since we were not able to make a machine of reasonable price, size or sufficient flexibility; however, the principles involved in the invention of Mr. R. B. Johnson gave promise of meeting the cost and accuracy requirements set up by test experts. After three years of further development work we are able to give you a machine which will now go far beyond our original hopes and expectations. The International Test Scoring Machine will handle objective tests of the aptitude and achievement type. It will score achievement tests of the true-false or multiple selection type, and the interest test of the "like, dislike and indifferent" type with variable item-weightings.

I should like to point out here that the machine will not score every type of objective test and that the machine is at best only an intermediate instrument to give raw scores quickly and accurately.

I should also like to point out and emphasize the fact that while the machine reduces the cost and errors of test scoring, it does not release teachers and guidance officers from the necessity of using human judgment in interpreting and applying test results. The machine is a labor-saving service and research instrumentality, but not a panacea for the complex guidance and adjustment problems that beset our schools and colleges.

The machine will produce the following results on test scoring. It will score rights, wrongs, the rights minus the wrongs, the rights minus any multiple or fraction of the wrongs. It will furnish the per cent, and it will furnish this information on three tests and the

aggregate simultaneously. The test scores can be obtained at from 400 to 800 per hour.

Let me explain a trifle more in detail how this takes place. A separate answer sheet is used. For instance, we will consider an achievement test which has 150 questions, with five choices on each question. The student reads the question, which might conceivably be, "Which of these men is the President of the United States: Morgan, Garner, Hull, Roosevelt or Coolidge?" Obviously, the correct answer is Choice No. 4. The student then refers to his answer sheet where he places a heavy black pencil mark under Choice No. 4 of Question No. 1. This operation is repeated throughout the entire test. The machine now will function from these pencil marks as follows. A master answer sheet is prepared which, instead of having a pencil mark on each correct answer, has a hole punched through the sheet for each correct answer. This is called the scoring key. This key is inserted in the place provided in the machine and clamped into position. This clamping operation has the following effect. It allows a series of contacts to slide into one of two positions. The contacts which are allowed to slide through the holes which are punched for the correct answers set up a positive current of electricity. Those which are prevented from sliding through the paper because of the fact that no holes are punched are held in a position so that they set up a negative current of electricity. When the student's answer sheet is dropped into the machine, a series of 750 contact units are pressed against the answer sheet. The pencil mark, being a conductor of electricity, allows current to pass, completing a circuit wherever a pencil mark appears. Those receiving the positive current from the correct answers accumulate and tend to pull the scoring meter from zero up to 100, while those marks setting up a negative current—in other words, wrong answers—tend to pull the meter from 100 down to zero. Consequently, the effect of these two currents pulling one against the other is to balance the meter indicator at the correct score.

It is interesting to note that if every choice in every question were marked, the machine would indicate 150 correct answers, but it would also indicate 600 incorrect answers. In scoring a five-choice test, we would use the formula "rights minus one quarter the wrongs," so that in this case the meter would show a score of zero.

The tests we are referring to could be split into three parts of 50

questions each and all three parts and the total could be scored at one insertion.

In using the machine for scoring results of interest tests, such as the Strong interest test, the machine has the ability to weight any of the 750 individual items from zero to 10 or from plus 5 to minus 5. The aggregate result is recorded directly on the meter.

By removing the scoring cage from the machine and replacing it by the weighting unit, the machine can be used for doing another job, that is, calculating weighted averages.

For instance, the machine can calculate ten variables of three items each weighted from zero to 20, recording the result instantly.

Use of the machine has been concentrated on scoring test results, rather than developing uses of the weighting unit. A great deal of ingenuity is, however, already indicated by way of developing uses of the weighting feature of the machine. It is possible to use the machine, say, in the registrar's office, for rapid computation of scholastic achievement by semester, by year and by total residence in college or school. This can be done much in the same way as grades and courses are averaged. For instance, if grades run from A to E, a value could be assigned to each specific grade and the machine would compute the aggregate of these various marks and indicate a total.

It has been our sincere effort to design and produce a machine which, while meeting your needs, would come within your financial resources. This we feel we have done in producing a machine which rents for \$300.00 a year to educational institutions. There will be a nominal additional rental for the item weighting unit for scoring such tests as the Strong Interest, the Bernreuter, the Dunlap Academic Preference, etc.

Admission to the General College of the University of Florida

H. W. CHANDLER

In order to outline the plan of admission exercised by the General College of the University of Florida, it is expedient that the several factors which have conditioned our present plan be explained. These conditions which have forced us to act are, I dare say, not singularly native to the University of Florida but are common in most of our state universities and other colleges as well.

In reckoning with these various existent problems which our old system ignored, we did not consider each problem alone with the possibility of uncorrelated solution, but we tried to establish workable guiding principles, the application of which would improve the whole situation.

Chief among the various problems which our new admission requirements had to take cognizance of are these three:

1. Freshmen who came to us were forced to elect from a wide variety of narrow, specialized curricula. They had to make their decision as to college and department on their first registration day, and they had to choose one of the curricula available. They did not have information sufficient to make an intelligent choice and hence the choice was largely a matter of chance. The results of this procedure were quite unsatisfactory.

2. Since less than 30 per cent ever completed the program, and less than 50 per cent ever completed more than two years in the University, the students were beginning "academic foundations" which were never completed. To a great extent the students did not understand what was being attempted. The loss to students who never used these "academic foundations" was very great.

3. Artificial, untenable, and in some cases outright foolish entrance requirements were set up by the colleges. The applicants who met each specific requirement were readily admitted regardless of whether they possessed a desirable and unified preparation, while those who did not meet these item by item conditions were denied admission regardless of the total picture.

I believe that the three factors which I have given you are enough to indicate to you the situation which faced us when we began our attempt at a solution of the problem.

In terms of mathematics, particularly in terms of the solution of differential equations, you are aware of the fact that a differential equation has a family of solutions. From that family a particular solution can be found only when the proper initial conditions of the problems are given. We believe that the family which constitutes our solution is the field of General Education. In attempting to apply this solution we have searched for a core which all students should have regardless of their life profession. That we have found this we are not sure, but we do not feel that we have moved in the right direction and that we are refining our course materials through which we expose our students in the major fields of human knowledge. Upon taking cognizance of the initial conditions which pertain to our University we get a particular solution which fits our needs. We have done this, but we are conscious of the fact that these initial conditions are subject to change, and that while we may have a particular solution which at one time fits those conditions, it will be necessary to modify our present solution as the initial conditions change. We are firm in our belief that the general solution of our problem is General Education, but we are just as firm in believing that our particular solution is one that is not static. Our plan of admission is, therefore, a part of the program of General Education which we are attempting.

This program of general education is administered by the General College which has been organized to administer the work of the Lower Division for all entering freshmen. The purposes of this college are: (here I quote from our bulletin).

1. To offer an opportunity for general education and to provide the guidance needed by all students. Thus the choice of professional work is postponed until the student knows better his capacity and disposition to undertake work that will be profitable to himself and society.

2. To broaden the base of education for students who are preparing for advanced study in the colleges and professional schools of the Upper Division, thereby avoiding the handicap of narrow specialization.

3. To satisfy the needs of those who have only a limited time to give to college training, and consequently should concern themselves with general viewpoints and major understandings, instead of introductions to special subject matter fields which they will never enter.

4. To provide for the constant adjustments required in higher

general education incident to the changing conditions of modern life. The subject matter of the various courses and the methods of presentation are to be constantly varied in order to awaken the interest of the student, to stimulate his intellectual curiosity, to encourage independent study, and to cultivate the attitudes necessary for enlightened citizenship.

From these statements it is obvious, therefore, that the principles of admission to the General College would differ radically from those appropriate to pursuance of specialized curricula. No one subject or element is a *sine qua non* for admission. We consider the total picture. Furthermore we hope to meet other problems, particularly the charge that the State University by its rigid requirements so narrowed the high school program that the high school was not free to solve its own problems without actual interference on the part of the University. To this end we gave every high school principal in the state the opportunity to be heard on the question we were discussing. After months of study of our own problem, with little or no reference to what was being done elsewhere, we adopted the following entrance regulations.

GENERAL STATEMENT

The usual technical requirements for admission to the University have been removed. Only those applicants are rejected who definitely indicate that they are unprepared to profit by one or more years of the program offered in the General College.

The University of Florida does not require *any* specific high school units for admission to its General College. However, students must have certain skills and attainments in English and mathematics and a certain level of general ability, in order to pursue with profit the work that will be offered in the General College. As a guide to the high school teachers and students a statement of the requisite attainments in English and mathematics is given.

Since specified high school credits or units are no longer required for admission to the University, the high schools are free to teach those subjects which offer the greatest good for the greatest number. This is a most significant help to the many small high schools of the State. The attainments now required for University admission are not guaranteed by the acquisition of high school credits. On the other hand, the attainments are possible without specific high school class attendance.

The following items are considered in admitting students to the General College of the University of Florida:

1. Graduation from high school.
2. Consistency of the high school record of the student.
3. Achievement in high school.
4. Personal qualities.
5. Recommendation of high school principal.
6. Standing on Placement Tests.

Graduation from high school is required, although no specific high school units are required. The Board of University Examiners may in rare cases, when the principal of the high school the student has attended recommends such action, permit an exceptional student, before graduation, to take the Placement Tests; if the student passes these tests satisfactorily, he will be admitted to the General College. Mature students, lacking formal high school education, but possessing because of some other training the necessary admission requirements, may petition the Board of University Examiners for permission to take the Placement Tests and the College Aptitude Test; upon satisfactorily passing these tests, such students without high school graduation will be admitted to the General College.

Placement tests are offered in the high schools of the state during the spring semester. Although we are a state institution our Board of Control is given the authority to give such examinations in any subjects to all high school students. This implies the authority to give the tests as a prerequisite for admission to the University. The tests we are now giving are experimental in nature. What we think may result from this beginning is a battery of tests given throughout the pupil's educational career until the time he enters college. This cumulative record would give us a desirable history of the student's growth. Creditable achievement, indicative of ability to profit by the General College program, is required before the Board of University Examiners grants the student permission to register. Any applicant rejected, or others not included in the above, may as a final resort qualify for admission by passing the college aptitude test. The results of these tests discourage certain high school graduates from attempting college training where failure is almost certain. Even more important, some graduates of high scholastic ability, who might not otherwise go to college, are encouraged to make a special effort to do so.

I shall again quote from our Bulletin: "Those pre-college students

who have definitely made a choice of the occupations or professions they will follow and who expect to enter a certain curriculum of the

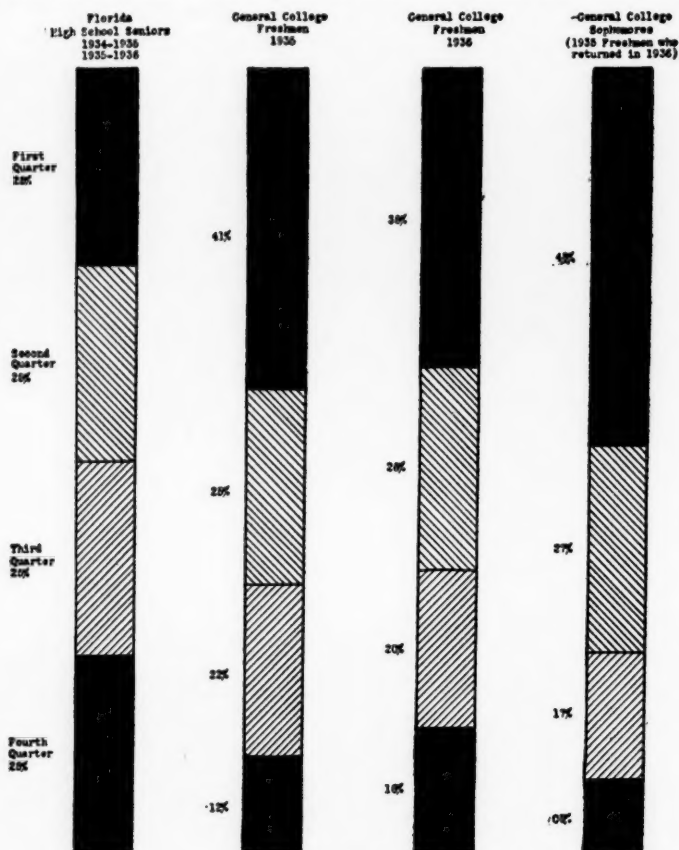


Chart No. 1

PROPORTION OF THE UNIVERSITY OF FLORIDA FRESHMEN AND SOPHOMORES COMING FROM EACH QUARTILE OF THE HIGH SCHOOL SENIOR CLASS

Quartiles for the high school class are based on the Iowa Content test.

FIG. I. The upper 25% of all high school seniors in 1935 furnished 41% of the freshman class in 1935-36 and 48% of the sophomore class in 1936-37. In 1935-36 students in the upper quarter were written and urged to enter college, and those in the lower quarter were advised against entering college. It was impossible to do this in 1936. The fact that it was not done is reflected in the composition of the 1936 freshman class.

Upper Division upon completion of the General College work, may profit by the following suggestions:

"Certain curricula of the Upper Division require a working knowledge of foreign language. Students contemplating entering such curricula could with profit begin this study in the high school.

"Students expecting to study engineering need a thorough training in mathematics. An effort should be made by such students to obtain the broadest possible mathematical training in the high school. These students should obtain, either in high school or by private arrangement, or by correspondence study, knowledge of elementary mechanical drawing and elementary woodworking.

General College										ADMISSION DATA										University of Florida										For 1936-37									
Mainland, Daytona Beach, Florida										April 5, 1935										Merchant										June 3, 1917									
High Schools										Date of Grad										Parent's Occupation										Date of Birth									
HIGH SCHOOL RECORD																				AMERICAN COUNCIL										IOWA CONTENT									
																				Co Ar AL An Op T Ex										Ma Sc Hi T									
Subject	D	C	B	A	Subject	D	C	B	A																														
En I	1			*	Gen Scs	1			*																														
En II	1			*	Buy	1			*																														
En III	1			*	Bus Arith	1			*																														
En IV	1			*																																			
En																																							
Sh																																							
La	2			*																																			
Hy	3			*																																			
Civics																																							
Algebra	2			*																																			
Plane	1			*																																			
Solid																																							
Trig																																							
Ps	1			*																																			
Cy	1			*																																			
Courses Failed										None																													
First Recom.										P F Av										X																			
Rank										1/23										Choice Undecided																			
Last name										First name										Middle name																			
Doe,										John										Excellent																			

FIG. II. The profile chart of a superior student. This card shows a mass of essential information concerning the high school record; the achievement in percentile rank, based on state wide groups, on the two placement tests; etc. This student, although from a small high school, had a good record both in high school and on the tests. His record is consistent. See Fig. III for the record of performance in college.

"Students expecting to pursue architecture should obtain a thorough foundation in mathematics, and begin the study of drawing as early as possible."

You can readily see by the statements just made that we are definitely trying to push certain requirements, which often had to be met after entering the University, down to the lower educational level.

ACTUAL ADMISSION PROCEDURE

As stated above, an effort is made, through a state wide testing program, to have all seniors in the state take during their last

semester in high school the tests that are used in our admission practice. A reasonably large percentage do this. In cases where it is not done, we offer the tests at the University in June and also in September just before Freshman Week. An attempt is then made to evaluate the record of each student in light of the several points made above. We do not actually forbid the entrance of any high school graduate to the University. We have found that by advising

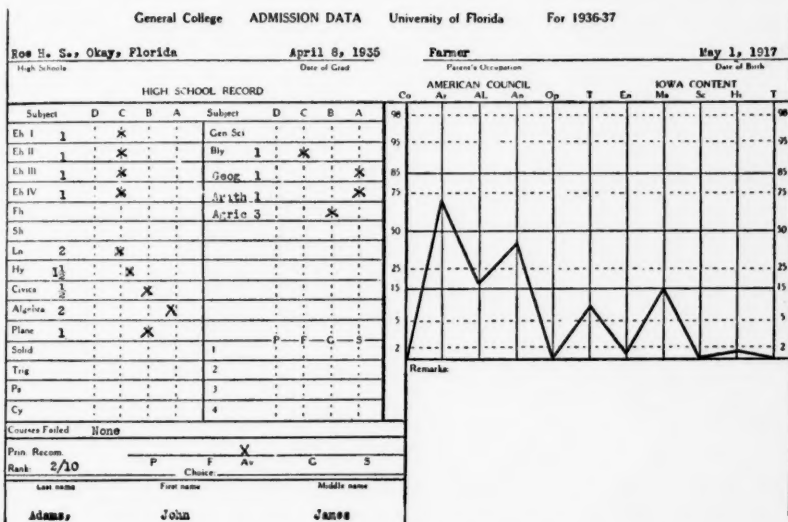


FIG. IV. Profile chart of a student whose high school record is average and whose test scores are poor. This student was second in a small class and was admitted despite his test record. His tests showed him to be better in mathematics than anything else. Note in Fig. V that he passed only one course with a grade of "D" and that was a semester course in mathematics.

with some students and their parents we are able to convince them that the student, although a high school graduate, is not yet prepared to take University work with profit. In all such cases we urge the student and parent to actually come to the University for an interview. By this method we often find other hitherto undisclosed factors which may be pertinent to either stronger advice against coming or occasionally the changing of our opinion of the probable success of the student. Oftentimes students are given the opportunity to take additional tests at the time of the interview.

We find many situations which lead us to believe that the personal interview in some cases is essential. We find that the valedic-

UNIVERSITY OF FLORIDA
GENERAL COLLEGE
OFFICE OF THE REGISTRAR

Failure letter sent June, 1936

PLACEMENT TESTS
AMERICAN COUNCIL
ROWA CONTENT

John James Adams
Box 15, Lake City, Fla.
May 1, 1937
Lake City, Fla.
Farmer

Mr James J Adams
Route 3
Lake City, Florida
Eon High School, Oklawaha, Florida
Apr 8, 1935 Sept 23, 1935

REMARKS

TEST	SCORE	REMARKS
1935-36	C-1	12-9
	C-2	X
	C-3	X
	C-4	X
	C-5	X
	C-6	X
	C-7	X
	C-8	X
	C-9	X
	C-10	X
	C-11	X
	C-12	X
	C-13	X
	C-14	X
	C-15	X
	C-16	X
	C-17	X
	C-18	X
	C-19	X
	C-20	X
	C-21	X
	C-22	X
	C-23	X
	C-24	X
	C-25	X
	C-26	X
	C-27	X
	C-28	X
	C-29	X
	C-30	X
	C-31	X
	C-32	X
	C-33	X
	C-34	X
	C-35	X
	C-36	X
	C-37	X
	C-38	X
	C-39	X
	C-40	X
	C-41	X
	C-42	X
	C-43	X
	C-44	X
	C-45	X
	C-46	X
	C-47	X
	C-48	X
	C-49	X
	C-50	X
	C-51	X
	C-52	X
	C-53	X
	C-54	X
	C-55	X
	C-56	X
	C-57	X
	C-58	X
	C-59	X
	C-60	X
	C-61	X
	C-62	X
	C-63	X
	C-64	X
	C-65	X
	C-66	X
	C-67	X
	C-68	X
	C-69	X
	C-70	X
	C-71	X
	C-72	X
	C-73	X
	C-74	X
	C-75	X
	C-76	X
	C-77	X
	C-78	X
	C-79	X
	C-80	X
	C-81	X
	C-82	X
	C-83	X
	C-84	X
	C-85	X
	C-86	X
	C-87	X
	C-88	X
	C-89	X
	C-90	X
	C-91	X
	C-92	X
	C-93	X
	C-94	X
	C-95	X
	C-96	X
	C-97	X
	C-98	X
	C-99	X
	C-100	X

FIG. V. Permanent record card of the student whose profile chart was shown in Fig. IV. This student repeated two examinations in August and failed them a second time. He was advised against returning to the University, which advice he followed.

General College ADMISSION DATA University of Florida For 1936-37

Pahokee, Florida May 1935
High Schools Date of Grad

FARMER August 29, 1915
Farmer's Occupation Date of Birth

HIGH SCHOOL RECORD

Subject	D	C	B	A	Subject	D	C	B	A
En I	1				Gen Sci	1			
En II	1				Biy				
En III	1				Agric	3			
En IV	1				Econ	2			
Ph					Soc Sci	1			
Sh					Geog	2			
Ln					Sy	2			
Hy	3								
Civics	1								
Algebra	2								
Plane	1				P-F-G-S				
Sold									
Trig									
Pa									
Cy									

Courses Failed None

Prim. Recum Rank 20/29

Choice Agriculture

Last name First name Middle name

Newton, John Edward

AMERICAN COUNCIL
Cn An Al An Op T En Ma Se He T

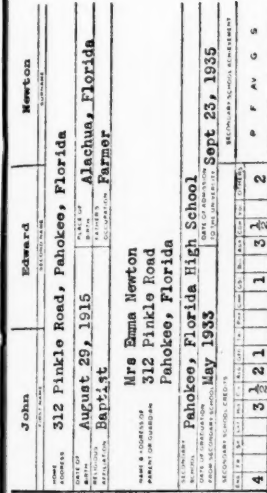
ROWA CONTENT

25 50 75 90 95

2 5 15 25 35 45 55 65 75 85 95

Remarks

FIG. VI. Profile chart of an average student.



YEAR	NUMBER	PROGRESS REPORT										COMPLETION										REMARKS
		E	D	C	B	A	DATE	E	D	C	B	A	DATE									
1935-36	C-1	X					12-9															
	C-2	X																				
	C-3	X						X														
	C-4A	X																				
	C-4B	X																				
	WY 101-102																					
1936-37	C-5	X					12-8	X														
	C-6	X																				
	C-6D	X						X														
	C-6E	X						X														
	WY 201-202																					

FIG. VII. Permanent record card of the student whose profile chart is shown in Fig. VI. His electives indicate that he is preparing to enter the College of Agriculture.

torian of a certain small high school ranks in the lowest 2 per cent in the State on both the psychological and the high school content tests. Probably the high school principal has rated the student fairly high on the basis of his high school performance, largely because of a lack of a reasonable standard of comparison. Only by means of the interview can such cases as these be made to understand the error in attempting college work.

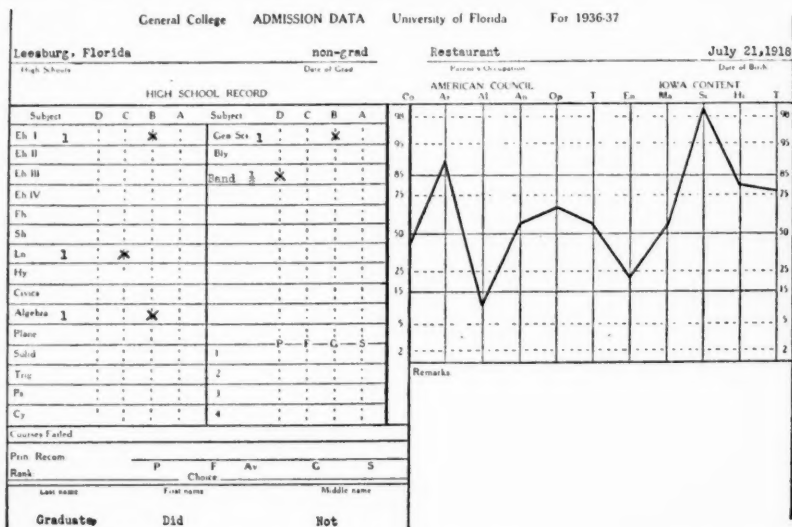


FIG. VIII. Profile chart for a student who did not complete high school. This boy had a chemistry laboratory of his own. His knowledge of chemistry was equal to if not better than that of the average junior in a chemistry major. He was denied admission under the old plan, but reapplied with the advent of the General College and was admitted. See Fig. IX for his record in college work.

We feel, therefore, that before giving advice concerning admission, we need every possible bit of information that we can get. The program of guidance begins when the student applies for admission with the above mentioned information as a basis. As indicated before we hope it will eventually begin much earlier.

What are the results of our experience in handling admission by this procedure? Since we have been working under this system but two years we have only meagre information as yet. We shall probably change some of the initial constants in this equation and find a better working solution as soon as our experience is broader. However, the reader's attention is called to the figures accompanying

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[illegible]

this article. They will help to answer this question in a way that will be more pointed than that resulting from merely reciting statistics.

The mere presentation of a certificate indicating that the student may enter the General College is not the end of our admission procedure. An attempt is made to assemble on a card all the information we have obtained about each student. We call it a profile chart. Typical profile charts are shown in Figs. II, IV, VI and VIII. The adviser has this at hand at all times during any interview with the student. No effort is made to keep the information from the student if he wishes to know it. Information of a confidential nature from any source is, of course, properly guarded. By referring to Figs. III, V, VII and IX the reader will obtain some indication of the use that is made of the information.

One aspect of the General College program which I feel might be mentioned in this connection, because of the fact that it is through this that we are building up our materials for evaluation, is the comprehensive examinations.

Progress toward completion of the General College program is measured by success on comprehensive course examinations. These examinations form the sole basis for determining the students' progress and the student must pass eight or more of them to complete the work of the General College. Grades on the comprehensive examinations correlate about .65 with scores on the placement tests.

EVALUATION

It is too early to evaluate our procedures with any great assurance. Every evidence indicates that we are on the right track. The consistency with which it has been shown that the results on the examinations coincide with other evidences which we have, is of some significance. In a few more years we will have the records of ten to fifteen thousand students added to our studies. We hope that our method can be used to cope with the problem arising from ever changing conditions. We are determined that this laboratory material will be used in an exhaustive and critical study of our procedure.

Evaluation at the College Level in the Eight Year Study of the Progressive Education Association

JOHN L. BERGSTRESSER

It is evident that to talk on a subject involving "evaluation at the college level" is—in so far as a great number of the Registrars and their assistants are concerned—like "carrying coals to Newcastle." I am aware of many splendid studies carried on by Registrars and their staffs which have dealt with numerous aspects of the evaluation of college achievement: therefore, I come before you today with a sense of modesty that is requisite, as well as fitting, in the presence of professional experts. However, I do have one good excuse for talking to you about "evaluation at the college level." It is this: the evaluation project I am to discuss is intimately related to the Eight Year Study of the Progressive Education Association, a large scale experiment which is doubtless of interest to all of you.

Some of you, I am sure, already know a great deal about the Eight Year Study. But judging from my own experience prior to last June, there are probably others among you to whom the term Eight Year Study connotes a somewhat vague and intangible educational project. For that reason, I am going to refresh your memories concerning this project by reading a brief quotation from an article prepared by Wilford M. Aiken for *The Educational Record* of January, 1935:

"In May, 1932, a proposal for better coordination of school and college work was submitted to the colleges by the Commission on the Relation of School and College of the Progressive Education Association. This plan, the product of two years of study by the Commission, had been discussed informally in a series of conferences with college presidents, deans and admission officers.

"In brief the plan provides that a small group of secondary schools be set free by the colleges to engage in experimental study of the work of the secondary school, and the colleges agree to accept students from these schools for a period of five years, beginning in 1936, without regard to the course and unit requirements now generally in force for all students and without further examination.

"Selection of candidates from these schools will be based, instead, upon the statement of the principal of the school and a carefully

recorded history of the student's school life and of his activities and interests, including results of various types of examinations and other evidence of the quality and quantity of the candidate's work, also scores on scholastic aptitude, achievement, and other diagnostic tests given by the schools during the secondary school course.

"More than 250 American colleges and universities have given official approval of the plan and assurance of cooperation."

To attempt to describe, even sketchily, the "experimental study of the work of the secondary school" alluded to in the quotation just read is out of the question in the time at my disposal. There are some thirty-odd secondary schools co-operating in this study, and each of them is attempting to evolve and implement its own objectives—in short, to make its procedures indigenous to its own peculiar educational soil and climate. To describe "the experiment," then, would be to describe thirty experiments. However, I may insert, for the sake of whatever meaning it may have for you, that the thirty participating schools were chosen from among the so-called progressive schools and that they are assumed to hold in common the basic philosophy and viewpoint of progressive education.

Suffice it to say, then, that the Eight Year Study got under way in the Fall of 1933. Most of the thirty schools began the experiment at the 10th grade level. Consequently in June of 1936 the first batch of seniors was turned out of the experimental ovens—well done or half-baked, time and careful observation alone will tell. In the Fall of 1936 from 900 to 1,000 of these students entered upwards of 150 colleges and universities scattered from Maine to California.

As is true of almost every social or educational experiment, the question, "What have you got now that you've done it?," has been a tough one to answer in the Eight Year Study. But the question, I am happy to say, has been courageously faced, rather than ignored or neatly side-stepped. To illustrate I shall read one more quotation from the article by Mr. Aiken:

"It is important that any educational project, experimental in nature, should be evaluated as carefully and accurately as possible. It is necessary that each school should have its objectives clearly in mind and the procedures for reaching them well thought through. It is equally necessary that progress toward those objectives should be measured definitely. This is a difficult task under conventional conditions, and especially difficult where new work is being inaugurated. The Directing Committee has recognized the need for the

best expert service at this point. For more than two years a Committee on Records and Reports, consisting of school and college representatives under the leadership of Dr. Eugene Smith as chairman, has been at work on this very difficult problem.

"Near the beginning of this report I referred to a subvention from the General Education Board supplementary to that which we received from the Carnegie Corporation. That grant made it possible for the Directing Committee to engage Dr. Ralph W. Tyler of the Bureau of Educational Research of Ohio State University and Dr. Oscar K. Buros of Rutgers University to devote a large measure of their time during this year to the task of developing adequate ways of measuring and evaluating the results of our work."

It is clear that almost from the beginning a trained staff of experts—now grown to large proportions and functioning under Dr. Ralph W. Tyler as research director—has been utilizing every technique available in the field of tests and measurements (and, incidentally, inventing several new devices of its own) for describing and evaluating the experimental work carried on at the *secondary level* in the Eight Year Study.

It was foreseen, also very early in the game, that—in order to round out the effort to evaluate the results of the Eight Year Study—a "follow-up" study at the college level had to be attempted. In February, 1936 Dr. Tyler constructed the skeleton outline for such a study in a document, addressed to the General Education Board, which was entitled "Proposal for a Study of the College Success of Students Graduating from Secondary Schools Under the Eight Year Plan." The General Education Board agreed to advance funds for such a study over a period of five years beginning in July, 1936; and so Dr. Tyler added to his evaluation staff a "college division" and selected four persons, experienced in college personnel work and college teaching, to man the new division. The four individuals are: Mr. Dean Chamberlin, formerly assistant dean of freshmen at Dartmouth College; Mr. William E. Scott, formerly assistant dean of students at the University of Chicago; Miss Enid C. Straw, formerly instructor of English at Wellesley College; and the present speaker who is on leave this year from the position of assistant dean in the college of letters and science at Wisconsin.

The first task of the college representatives, as the members of the college division of the evaluation staff were called, was to become acquainted with the objectives and procedures of the thirty

schools and the general purposes of the Eight Year Study. After several weeks of intensive orientation, the college representatives were more or less prepared to tackle, with the help of Dr. Tyler's staff, the job of laying out a comprehensive and rather detailed plan of procedure for the present academic year. The first required step appeared to be that of defining "college success." We struggled and floundered badly! Although we might have been able to phrase a definition which would have satisfied us, we came to realize that we could not formulate a definition which would be acceptable to all who might wish to make their own independent judgments about the outcomes of the Eight Year Study. We changed our tactics and concentrated upon the discovery of criteria for determining the success or failure of a student in a number of areas of college life. Our purpose now became that of obtaining records and judgments—evidence, if you will—concerning various aspects of the student's development and experience. Our hope has been that we shall be able to assemble sufficient "raw materials" for the making of fair judgments about the college success of the student, whatever may be one's preferred definition of success in college—for example, whether one defines it narrowly in terms of a formal academic record or whether one's definition includes many other criteria for success on which evidence is not found in the typical transcript of credits or, ordinarily, in the official college records.

To provide ourselves with a working "blue-print" embodying the idea which had been agreed upon we drew up a statement entitled "Suggested Criteria for Guiding the Study of Various Aspects of College Success." The suggested criteria, nine in all, are as follows:

- I. Intellectual competence.
 - II. Cultural development; use of leisure time; appreciative and creative aspects
 - III. Practical competence; common sense and judgment; ordinary manual skills; environmental adaptability.
 - IV. Philosophy of life (pattern of goals)
 - V. Character traits (patterns of behavior)
 - VI. Emotional balance (including mental health)
 - VII. Social fitness
 - VIII. Sensitivity to social problems.
 - IX. Physical fitness (knowledge and practice of health habits)
- Each of these criteria is split up into more detailed and specific

subdivisions; and opposite each criterion are listed suggested sources of evidence. For example, the first criterion is subdivided as follows:

<i>Criteria</i>	<i>Sources of Evidence</i>
1. Intellectual competence of the student	
A. Scholarship Formal measurement of academic achievement	*1. Official college records *2. Honors, prizes
B. Intellectual curiosity and drive Manifestation of interest and activity in intellectual matters beyond course requirements	*1. Questionnaire; reading records; books owned *2. Interview; interests—number, quality and variety 3. Samples of written work 4. Reports from instructors
C. Scientific approach Degree in which his work and thinking conforms to the usually accepted characteristics of the scientific attitude	*1. Tests 2. Interview 3. Reports from instructors 1. Subject-matter placement tests 2. Oral reading tests 3. Silent reading tests 4. Other tests (library use, study techniques, etc. 5. Samples of written work *6. Reports from instructors a. Research ability b. Accuracy, thoroughness, and organization c. Facility with examinations d. Request for special aid *7. Interview and questionnaire a. Time distribution b. Study environment c. Student's own evaluation *8. Official records a. Excuses and cuts b. Late papers c. Remedial records
D. Study skills and habits Willingness and ability to employ the tools of learning	

I shall not go into detail concerning the eight other criteria for guiding the study of college success, because I want to utilize the remaining few minutes of my time to say something about the procedure followed in collecting data from a number of colleges this

year. Since we wished to make the study an intensive one, we obviously could not hope to visit the 150 or more colleges in which students from the thirty schools matriculated. Consequently, each of the college representatives selected some four or five colleges largely on the basis of: first, type of institution; second, the number of Eight Year Study students enrolled. Mr. Chamberlin confined his attention to eastern Men's colleges, such as, Dartmouth and Harvard; Miss Straw chose eastern Women's colleges, including Wellesley, Smith, Bryn Mawr and others; Mr. Scott selected privately endowed coeducational institutions—Swarthmore, University of Denver, University of Chicago, and University of Pennsylvania; and I have been working in state supported institutions,—Ohio State, Wisconsin, Iowa State College, for example. The colleges and universities where studies are being made this year have in residence, it is estimated, approximately one-third of the total number of Eight Year Study students who entered college in the Fall of 1936.

The typical procedure of the college representative the first time he visited a college involved three steps:

1. Preparation, from all of the college admission records, of "histories" for all Eight Year Study students. (A printed form called the "Summary of Entrance Data" was used for recording all available data on high school and home backgrounds, vocational and college choices, test records, and so on).

2. Selection of what we have called a "comparison group" from among the freshmen who had not graduated from high schools under the Eight Year Plan.

In the selection of these students an attempt was made to "equalize" the "comparison group" and the Eight Year Study group on the basis of such factors as:

Geographic distribution; type, size, location of school

Racial background

Family circumstances; financial, cultural, father's occupation etc.

Age

Standing in high school class

Scholastic aptitude rating

High school interests

Vocational objectives and college course

We fully realize the difficulties and dangers inherent in such comparisons as are being attempted. On the other hand, whatever

comparisons are made—as, inevitably, they must and will be—had better be made on a basis which involves an honest effort to take into account selective and determining factors, such as the ones which have been listed. Dr. Tyler's reputation for scholarly and scientific research is guarantee that any comparisons approved by his evaluation staff will be cautiously drawn and carefully qualified.

3. Individual interviews with the students—including, of course, the members of the "comparison group" who, in all respects, were dealt with in precisely the same manner as the Eight Year Study group. During this initial interview the student was given a form called a "Personnel Record" which, when filled out, elicited considerable information concerning the student's early difficulties, interests, activities, and experiences in the college environment.

A partial summary of what the college representatives have accomplished, since the initial visit, in the colleges where the study is farthest advanced at this date includes the following steps:

1. Held two or more additional interviews with students.
2. Obtained grades for the first semester or the first two quarters
3. Copied pertinent data from college records in the offices of deans, counselors, and so on
4. Secured special reports on students from instructors.
5. Secured, from the students, on a form devised for the purpose, a record of reading and "other cultural experiences" over a period of two or three weeks.

By the end of the school year it is expected that all of these steps will have been completed in all of the participating colleges. In addition, all of the students will have been asked to fill out a questionnaire concerning various aspects of their experience as college freshmen; and in one or two universities, possibly, several special tests will have been tried out experimentally. After the completion of the school year, second semester and third quarter grades will be secured; and all data collected during the year will be recorded in a "Cumulative Summary of Data" form. In the summer the college representatives will devote a month or more to intensive study and analysis of these records.

Now, what you are doubtless most interested in hearing is an answer to these questions: "What have you found out?" "What conclusions have you drawn?" And at this point, after having

heartlessly led you on with a long account of procedures, I shall have to disappoint you and drop off into an anti-climax by replying, "we don't know yet: it is too early to answer." Here I am reminded of the story about a dramatic critic who unreasonably and habitually "razed" a certain actor for whom he bore a personal grudge. Finally, the actor's manager brought pressure to bear through the critic's editor. As a consequence, in his review of the actor's next play the critic confined his comment to these words: "Mr. X played Hamlet last night. He played it until 11 o'clock." Likewise, should you wish to put pressure on me, I could only say at this time, "I have found no evidence that the Eight Year Study students have been especially damaged by their high school experiences"—which means that on the basis of grades alone, the traditional criterion of college success, these students appear to be measuring up satisfactorily, in general, with the comparison groups.

By the end of the summer, when all of the freshman year evidence has been examined, there may be some tentative conclusions to present. However, it is believed that only after four or more years of study have been finished will completely satisfactory answers to the foregoing questions be forthcoming—if, indeed, such answers are forthcoming! Of course, it was never intended that definite conclusions about success in college should be drawn on the basis of the experience of the freshman year alone. You will remember that the study was set up in the first place as a five year study. That means that whatever final conclusions do eventually appear to be warranted will be based upon data collected for five college classes, and not for a single year's sample. Two of the five classes, in fact, will have had time to complete a four year college course before the study reaches its final stages. The tragedy of so much of our social and educational experimentation is that we have to wait so long for the answers, and that we are so uncertain of our procedures for testing results,—of measuring the effect of complex variables in the experimental situation. If large scale educational experimentation is ever to be successfully carried on we must, therefore, learn to be patient for results, and gradually to improve our methods for observing and checking them.

A Ten-Year Study of Iowa Placement Tests

H. H. ARMSBY

If, as the statisticians tell us, our population curve has commenced to flatten out, and if our college enrollment is due to reach its maximum in the very near future, it seems to me the problems of admissions and guidance will become increasingly important. If their prophesies are correct, and I believe they are, they mean an increasing responsibility on college officials to make every possible effort to get each student into the sort of work for which he or she is best suited—in other words to make the most efficient use they can of the limited amount of human material coming to their educational factories.

At the 1932 meeting of the American Association of Collegiate Registrars I presented a paper under the title "Can Success or Failure in Engineering Colleges be Predicted in Advance?" That paper contained a preliminary report of a study which was started in 1925 in which scores made by ten entering Freshman classes on a set of placement tests were to be compared not simply with the work of their first semester, but with their entire college performance. The ten classes, consisting of about 1300 students, have taken the tests; and seven classes, containing about 800 students, had completed their four college years up to the time the tabulations to be presented in this paper were prepared. The numbers are sufficiently large to be significant, and the results of the study should be of particular interest to Registrars, who more and more are assuming the duties of admissions and guidance officers. Although this study was conducted in an engineering college, the methods of work and the results and conclusions are in general applicable to any college.

In the fall of 1925 the Missouri School of Mines began the use of the Iowa Placement Tests as a basis for sectioning freshman classes according to the ability of the students. We have continued their use ever since and are pretty well "sold" on the sectioning idea—our faculty members in general believing that we have made distinct educational gains, at least in the high sections. We have used the Chemistry Aptitude, English Aptitude and Training,

Mathematics Aptitude and Training tests of the Iowa series, and a Drawing Aptitude test prepared by Dr. C. V. Mann, our Professor of Engineering Drawing and Descriptive Geometry.

At the time we began the use of placement tests, I conceived the idea of carrying much further than one semester a study of the students who took the tests, with the idea of attempting to discover whether or not there was any relationship between the results of the tests and general success in college beyond the Freshman year. In other words, it was my idea to ascertain whether or not the tests really were selecting the superior and inferior students, and if so which tests gave the most valid predictions. This study has been carried forward throughout the succeeding years, and in this paper I will give a very brief and partial report of some of my findings.

First, I wish to outline briefly my data and method of work. I compiled an abstract of the record of every student who has taken these tests at the School of Mines, a total of about 1300 boys. The record shows the score on each test, the number of semesters the boy has been in college, and his total scholastic record. For each test I made a tabulation of all the scores for the entire eleven years, and have then divided this range of scores into tenths; and in my study the figure I use for a boy's score is his tenth rather than his actual score on the test. Then under each separate test I grouped the members of each class according to these tenths. In other words, I combined the records of all those members of the class of 1929 who in the Chemistry Aptitude test made scores which placed them in the first tenth of all the students taking this test in the eleven year period, and I computed average figures for this small group; and the same for those ranking in the second tenth, the third tenth, and so on; and the same for each class and each test. For each group I listed the following information: the number in the group and the per cent of the whole class; the number graduated and the per cent of the group; the number of semesters completed; the number of credit hours scheduled; the number passed, and the grade points earned.¹ I also tabulated the number and percentage of each group graduating in eight semesters, the num-

¹ In computing grade points each hour of E grade carries three grade points, each hour of S carries two, each hour of M carries one, I grades carry no grade points, and each hour of F carries one negative grade point. The student's average grade is found by dividing his total grade points by the total number of credit hours he has passed.

ber and percentage who had no failures, the number and percentage dropped from school for failures, and the number and percentage receiving honors on graduation. Then I calculated for each group the percentage of their work passed and an average grade for the group. These figures have been tabulated for each class under each test, and a grand total for each test made for all the students in the seven classes which had graduated up to the time I started the compilation (about 800 students). I plan to complete the study for the remaining four classes.

I then prepared studies of combinations of tests by a method which schools of Education would probably denounce as very unscientific, but which strikes me as being very simple and as possessing all the accuracy warranted by the data. Instead of going through the long and laborious process of computing multiple correlations, standard deviations, etc., to combine the results of two or more tests, I have combined them by the simple expedient of taking the arithmetical average of each student's tenths on the two or more tests to be combined. For instance, if John Smith ranks in the third tenth on the English Aptitude test and in the fifth tenth on the English Training test, I call his rank on the combined tests 4. I don't believe that our original data contains enough precision to warrant all the elaborate mathematical computations which some of our friends in the School of Education would have us go through.

No account has been taken in this study of such factors as sickness, financial difficulties, family troubles, transfer to other schools, etc. I have simply compared Placement examination scores with actual total performance in college, making no attempt to make allowances for special circumstances. In other words, I am dealing with facts and not with what might have happened.

I shall not try to present in this paper all the details of this study. The amount of data is very large and to include all of it would make a paper of unpardonable length. I therefore include only one of my tables of data, Table I, which contains the data for all of the graduating classes under the combined tests for Chemistry Aptitude, Drawing Aptitude, Mathematics Aptitude, and Mathematics Training.

It will be noticed that the ten groups are not equal in size. This is due to a number of reasons, the chief one in all probability being my method of averaging tests; but regardless of the size of the groups, the data gives ten points for each of the curves which

are shown in Plate I. I include this table merely to show how the data is assembled and to give a general impression of what the figures look like. It will be observed that in all the columns except one the numbers decrease as we go down the columns and that the difference between groups 1 and 10 is very large and significant. The one column for which this is not true is the one showing the percentages dropped for failure, and in this column the figures in-

TABLE I
COMBINED TESTS, GROUP "E"
CHEM. APT., DRAW. APT., MATH. APT., MATH. TRAIN.
ALL GRADUATING CLASSES

GROUP	NUMBER IN GROUP	PER CENT OF TOTAL	% OF GROUP GRADUATED	SEMESTERS COMPLETED (AVER.)	SCHOLASTIC RECORD			% OF WORK PASSED	AVERAGE GRADE	PER CENT OF GROUP			
					HOURS SCHEDULED	HOURS PASSED	GRADE POINTS			GRAD. ON TIME	WITH NO FAILURES	DROPPED FOR FAILURE	RECEIVING HONORS
1	46	6	59	6.4	132	129	229	98	1.78	52	54	0	44
2	99	12	42	4.8	98	96	143	98	1.64	35	49	4	21
3	83	10	49	5.8	118	114	142	97	1.25	42	46	5	13
4	96	12	39	5.1	102	97	107	95	1.10	31	38	14	5
5	108	14	47	5.4	110	104	112	95	1.08	39	26	12	5
6	87	11	37	5.1	95	90	90	95	1.00	27	30	17	3
7	96	12	24	3.7	75	67	64	89	0.96	20	16	27	2
8	104	13	20	3.4	65	59	49	91	0.83	16	13	23	0
9	70	9	7	2.2	40	31	17	77	0.55	7	6	47	1
10	11	1	0	0.9	14	5	-7	36	-1.00	0	0	55	0
	800	100	35	4.5	90	85	98	94	1.15	29	29	15	9

crease as we go down instead of decreasing, which is, of course, what would be expected. The average student in group 1 stayed in school seven times as long as his classmate in group 10. He attempted almost ten times as many credit hours, and passed 26 times as many, having passed 98 per cent of his attempted work, as compared to only 36 per cent of attempted work passed by the boy in group 10. The boy in group 1 earned an average grade only a little short of an S (B on the conventional A, B, C, D grading system), while the boy in group 10 made an average grade of failure. Slightly more than 50 per cent of the boys in group 1 graduated on time and none of them were dropped for failure, while in group 10 the

figures are almost exactly reversed. Nearly half of the members of group 1 graduated with honors as compared to none of the boys in group 10.

Plate I shows graphically the data contained in Table I. These curves were plotted by laying off on the base line the ten groups, starting with group number 10 at zero, plotting the ordinates on the center line of each group, and drawing a smooth curve to average the ten points. I might say that very little averaging was required and that every curve shown here very closely fits its ten points.

It can easily be seen from these curves that this combination of tests certainly did pick out the very good students and the very

TABLE II
COMBINED TESTS, GROUP "E"
CHEM. APT., DRAW. APT., MATH. APT., MATH. TRAIN.
ALL GRADUATING CLASSES
Summary of High and Low Groups

GROUP	SEMESTERS COMPLETED	AVERAGE GRADE	PER CENT OF GROUP			
			GRADUATED	GRADUATED ON TIME	DROPPED FOR FAILURE	RECEIVING HONORS
Highest 10 %	5.9	1.76	58	51	0	40
Highest 20 %	5.8	1.72	53	45	2	25
Average	5.0	1.01	32	26	17	2
Lowest 20 %	2.8	0.71	14	12	38	1
Lowest 10 %	2.1	0.56	8	7	45	0

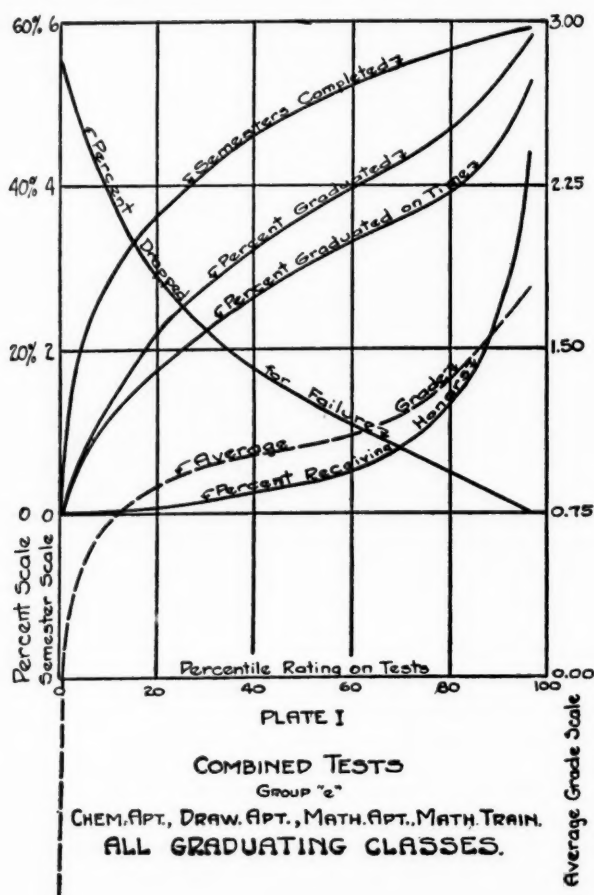
poor ones. A comparison between the values of the lowest 10 or 20 per cent of the class and the highest 10 or 20 per cent shows that on the basis of any of the criteria considered the boy in group 1 is a very much better scholastic risk than the average of his class, and that the boy in group 10 is a very much poorer risk than the average.

To aid in interpreting these curves I have prepared the next table showing in convenient form the ordinates of the various curves at the center line of the lowest 10 per cent, the lowest 20 per cent, the highest 10 and 20 per cent, and the average of the entire class. This table (Table II) shows that the student who was in the top tenth of his class on this combination of tests had almost twice as good a chance of graduating (and of graduating on time) as the average of all the 800 students, while the boy in the lowest tenth had only one-fourth as much chance as the average—or one-eighth as much chance as the boy in the first tenth.

None of the first tenth boys were dropped for poor scholarship,

while 17 per cent of all the 800 were dropped, and almost three times that proportion of the low tenth boys.

Two per cent of all the 800 boys graduated with honors—none of whom came out of the low tenth. But 40 per cent (or 20 times the average) of the top tenth boys were on the honor lists.



Evidently this combination of tests really did select the very good and the very poor students. It should be borne in mind that this study compares total college performance with a set of tests lasting less than seven hours, given before the students attended any college class, and that we are making no allowances for sickness, financial troubles, etc.

Having progressed thus far, it seemed quite natural for a Registrar and an ex-engineer to try to find some way of still further condensing his results. I wanted to find some one number to express all these criteria—for a quick and easy comparison of students and of tests. I believe I have found such a number—or invented it, and I wish to explain it briefly.

I believe that there are three standards by which the achievement of different students or groups of students may be compared—by quantity of work, by quality of work, and by speed. My Scholastic Index consists of three factors, one for each of these three standards, for I believe all three must be considered. Fortunately we have easily available very good measures of all three.

The factor measuring quantity of work consists of the total credit hours passed by the student divided by the number of hours required for graduation, so that for the student who exactly meets graduation requirements, the factor is 1; for the student who exceeds requirements, the factor is greater than 1, and for the student who falls short of graduation requirements, the factor is less than 1.

The second factor in my Index (quality) is the student's average grade divided by the average grade required for graduation—so that for the student who exactly meets graduation requirements this factor becomes 1; for the superior student it is greater than 1; and for the inferior student it is less than 1.

The third factor—time—is 8 divided by the number of semesters completed by the student. Certainly the boy who can graduate in 7 semesters deserves a higher rating than the boy who requires the standard eight semesters; and the boy who requires nine or ten semesters to graduate deserves a lower rating. In the case of the student who remains in college only two or three semesters this factor means that we are assuming for the purpose of this study that had he continued in school he would have continued to do the same calibre of work that he did while he was in school. This is probably as reasonable an assumption as we could make, and certainly is better than merely omitting him from the study or omitting the time factor.

Expressed as a formula, we then have;

$$\text{Quality Factor} = A = \frac{\text{Average Grade}}{\text{Graduation Average}}$$

$$\text{Quantity Factor} = B = \frac{\text{Credit Hours Passed}}{\text{Graduation Requirements}}$$

$$\text{Time Factor} = C = \frac{8}{\text{No. of Semesters Completed}}$$

The Scholastic Index is the product of all three factors, or

$$\text{Scholastic Index} = A \times B \times C$$

The Scholastic Index has a value of 1 if the student has just exactly satisfied graduation requirements; a value of greater than 1 if he exceeds them; and a value of less than 1 if he falls below the requirements.

Fortunately for me, this somewhat complicated-looking formula reduces to a very simple expression. The product of the numerators of the first two terms (Average Grade times Credit Hours Passed) is the number of Grade Points earned. The product of the denominators of these two terms (Graduation Average times Hours Required for Graduation) is the number of Grade Points required for graduation, which in our school is 120. So our expression becomes:

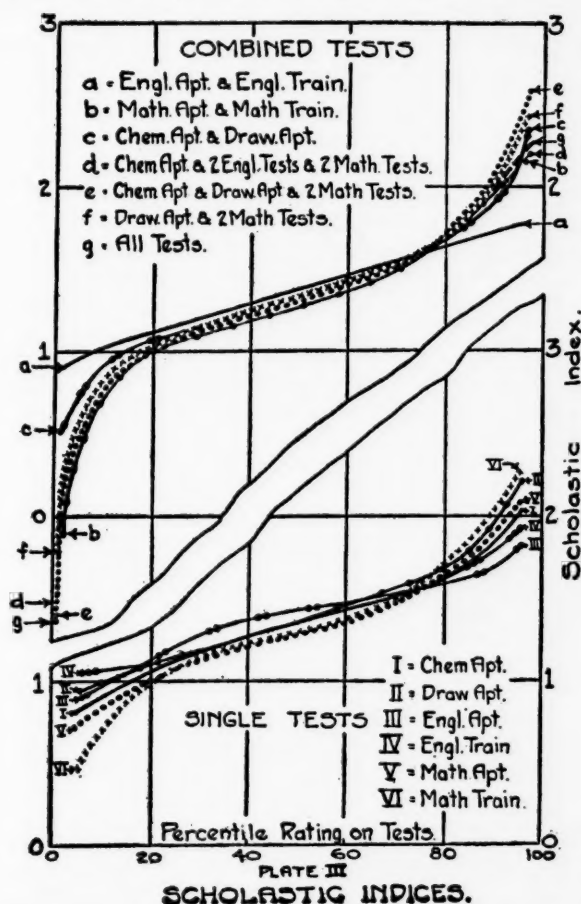
$$\text{Scholastic Index} = \frac{\text{Grade Points}}{120} \times \frac{8}{\text{Sem's Completed}}$$

$$= \frac{\text{Grade Points}}{15 \times \text{Sem's Completed}}$$

Plate III shows graphically the Scholastic Indices for each separate test and for each combination of tests studied. I computed the Scholastic Index for each student and for each of the groups I mentioned, and these graphs show the average values of the Scholastic Index for each percentile of the entire 800 boys who entered in the 7 classes which comprise this part of my study. The curves were constructed in the same manner as the previous ones, and here again little averaging had to be done—each curve actually passes through nearly every one of its ten points.

The lower set of curves show the Scholastic Indices for the 6 single tests, while the upper set (separated to avoid confusion) show them for the various combinations of tests. If the two were superimposed,

we would see that from about the 20th percentile up to about the 80th there is very little difference between any of the curves, but at the two ends there is a considerable difference. We cannot expect such tests to differentiate very sharply among the large group of boys in the middle of a class, but we do expect them to pick out the very



good students at the top and the very poor ones at the bottom; and the more sharply the curve deviates from the average line through the middle, the better the test is doing its job.

The English tests give the poorest predictions, and the combination of English tests is the poorest of the combined tests. The mathematics training test is the best individual test, although the

drawing test is a very close second to it. Among the combined tests the combination of chemistry, drawing, and the two mathematics tests gives the best results, being a little better than the combination of all tests. (This is why I use this combination in this paper.) The combination of drawing aptitude and the two mathematics tests is a very close second, and it, too, is better than the combination of all tests.

Table III shows the Scholastic Indices for the upper and lower percentiles of all single tests and combinations of tests. It is obvious that the Mathematics Training Test is the best single test. Of the

TABLE III
SCHOLASTIC INDICES
ALL GRADUATING CLASSES

GROUP	SINGLE TESTS						COMBINED TESTS						
	CHEM. APT.	DRAW. APT.	ENGL. APT.	ENGL. TRAIN.	MATH. APT.	MATH. TRAIN.	TESTS III & IV	TESTS V & VI	TESTS I & II	TESTS I & a & b	TESTS I & II & b	ALL TESTS	
	I	II	III	IV	V	VI	a	b	c	d	e	f	g
Highest 10%	2.00	2.20	1.78	1.86	2.05	2.20	1.76	2.13	2.25	2.10	2.45	2.30	2.20
Highest 20%	1.83	2.00	1.70	1.75	1.88	2.00	1.72	1.95	2.03	1.92	2.12	2.03	2.05
Average	1.35	1.35	1.40	1.32	1.27	1.25	1.35	1.23	1.26	1.30	1.30	1.30	1.30
Lowest 20%	0.90	0.97	0.97	1.06	0.83	0.65	1.00	0.70	0.88	0.72	0.76	0.79	0.77
Lowest 10%	0.80	0.90	0.90	1.05	0.72	0.45	0.95	0.25	0.70	0.45	0.45	0.45	0.46

combined tests, combination "e" is much the best on the upper end, while d, f, and g are equal to it and b is slightly superior to it on the lower end. The English tests seems to be the least predictive, in fact including them in our combinations seems to lower the predictive value. Perhaps the explanation is that the very best students in English have a tendency to be more interested in other fields than in Engineering.

Again I wish to emphasize the fact that Scholastic Index measures entire college performance—and that this whole paper is based, not on theory, but on recorded facts.

Table IV shows, for those interested in such measures, some correlations. I divided the individual Scholastic Indices into tenths just as I did the test scores, and computed the correlations between the tests and the Scholastic Indices, using ten divisions of each. These correlations are shown in Table IV and it will be observed that the values are very good when English is omitted

And for those who put little faith in correlations I have computed the figures shown in the last two columns. Perfect prediction of course would mean that every boy who ranked in the fourth tenth

on the tests would rank in the fourth tenth of the Scholastic Indices—and the same for each tenth. The figures in my last two columns show the per cent of cases in which the prediction is in error by two tenths, or less, and by three tenths or less. The first value is perhaps about the range of one letter in the ordinary four-letter grading system—the second is about a letter and a half.

To me these agreements are quite remarkable, in view of the character of our data, and in view of the many unknown factors which are of necessity omitted.

TABLE IV
CORRELATIONS OF TESTS WITH SCHOLASTIC INDICES
ALL CLASSES

TESTS	DESIGNATION	NUMBER OF CASES	CORRELATION (r)	PREDICTION IN ERROR 2 DIVISIONS OR LESS	PREDICTION IN ERROR 3 DIVISIONS OR LESS
Chemistry Aptitude	I	1246	0.50	64%	78%
Drawing Aptitude	II	1078	0.50	64%	78%
English Aptitude	III	1320	0.39	59%	73%
English Training	IV	1319	0.39	57%	71%
Mathematics Aptitude	V	1320	0.53	67%	78%
Mathematics Training	VI	1333	0.57	68%	81%
Engl. Apt. and Engl. Train.	a	1310	0.43	61%	77%
Math. Apt. and Math. Train.	b	1318	0.60	70%	83%
Chem. Apt. and Draw. Apt.	c	1000	0.53	69%	82%
Chem. Apt., 2 Engl. Tests, 2 Math. Tests	d	1160	0.59	70%	83%
Chem. Apt., Draw. Apt., 2 Math. Tests	e	975	0.61	73%	84%
Draw. Apt. and 2 Math. Tests	f	1062	0.58	73%	84%
All Tests	g	956	0.62	72%	85%

I make no claim for any high degree of mathematical accuracy at any point in this study. When it is remembered that the placement examinations occupy a total time of less than seven hours, that they are given to students before they attend their first college class, and that the scores made on these examinations have been compared with the students' entire college record, with no account taken of any special circumstances in the case of individual students, it seems evident that no great mathematical accuracy should be expected. Nevertheless, the predictions made by the placement examinations appear to have been surprisingly accurate.

It seems evident from the facts presented in this study that the Iowa Placement Examinations taken as a group constitute a very

effective general intelligence test and enable us to pick out with striking accuracy, before entrance to college, the very good students and the very poor ones. It is not claimed that these examinations are perfect, or that they cannot be improved upon, but as they stand now they do a very satisfactory piece of work. Perhaps some other group of tests would give better predictions in other colleges, but surely this study demonstrates that very reliable predictions of scholastic success are entirely feasible.

If such predictions can be coupled with tests of interest, such as the Strong Interest Test; and with a program of giving to high school students real first-hand information as to the work of the various professions and the aptitudes requisite to success in each; then, and only then, will we be in a position to make our educational factories run at their highest efficiency.

I see a vision of some future day when every high school boy and girl will have an opportunity to learn about engineering, or law, or journalism, or nursing, or any field in which he or she is interested, through lectures, printed material, and consultation with members of that profession and with other properly informed advisers.

I see the students who are interested in any profession taking a set of tests to determine whether they are adequately prepared to enter the college course leading to that profession with a reasonable hope of succeeding there; and being either encouraged to enter, urged to secure more preliminary training, or advised to enter some other field.

I see the various colleges, as a result of such a program, admitting only the well qualified students, and hence able to place their work on a much higher plane than is now possible.

And finally I see each student placed in the work for which he is best qualified, and hence utilizing his natural abilities where they can do the most good to himself, and hence to society.

Will my dream come true? It can if the professions, the colleges, and the high schools will all work together for its realization. It isn't going to "just happen." If it comes to pass it will be as the result of long, careful, sympathetic co-operation between the three groups. If it comes to pass we Registrars will of necessity play a very prominent part in the program. I believe the high schools are ready—are we?

Is There an Educational Dilemma— Flexibility vs. Standards

EDWARD S. JONES

The topic of standards which I will discuss is one that has been uppermost in the minds of educators very frequently in the past. It is again our problem, particularly in view of the great flexibility that is being encouraged in colleges as to curricula, courses and methods of instruction. We are frequently confronted with the issue: Can standards be maintained in the midst of this flexibility.

Early college education in this country, as in Europe, was to a large extent rigidly prescribed and dependent on a basic knowledge of the classics and mathematics. The natural sciences, the modern languages, even history as a separate field and other social science fields are innovations of the last seventy years.

An axiom of all former education had been to require those subjects which would discipline the mind, which would lead to a background of cultural information so that all modern issues would be evaluated with an adequate perspective. It is on the basis of this philosophy that England for over one hundred years has set her honors examinations and offered as first honors rewards the best civil service openings in the kingdom.

Interestingly enough, when we survey the examinations given in our colleges recently, we find that in no other field than the classics is there such a wide range of topics and is there an emphasis on so many interrelations of subject matter. A good classicist is not merely a linguist. He is familiar with history, philosophy, art and government. In this country our colleges had committed themselves to about the same educational philosophy as that which prevailed in England; and, until the period of President Eliot of Harvard University, held strictly to the classical and mathematical education of the English universities.

In the 1870's things began to happen to education in this country, and whether for good or ill, we must give the credit for these changes to President Eliot. He brought into Harvard a new emphasis on Chemistry and Physics, making them subjects based on research and analytic thoroughness. He introduced the social sciences and removed practically all of the older regulations from the

curriculum. He argued against strict attendance in classes and against the required chapel attendance. His liberalizing influence was present in every committee meeting. Said President Eliot: "To my mind the only justification of any kind of disciplinary training or drill is the attainment of the apparent end of that discipline. It is a waste for society and an outrage upon the individual to make a boy spend the years when he is most teachable in a discipline, the end of which he can never reach, when he might have spent them in a different discipline which would have been rewarded by achievement. Herein lies the fundamental reason for options among school as well as college subjects. A mental discipline which takes no account of differences of capacity and taste is not well directed. It follows that there must be variety in education instead of university prescription."¹

During the past 60 years this has become the ruling philosophy in American education. Only recently, a university president in the Middle West proclaimed that the colleges and universities of this country must take care of a larger percentage of the population. If our young people are unable to comprehend the present curricula, we must invent new ones. The idea of a rigorously applied standardized set of course requirements has all but vanished.

There is no longer any agreement as to what constitutes a course of study worth pursuing. The curse of overlapping courses and topics is widely evident. For example, one student takes four courses in Applied Psychology and another five in Vocational Guidance. A third received an A.B. degree in Sociology with over fifty hours of course work including many duplicate courses. Three courses used almost the same reference list. Every professor has been a law unto himself. He has given his examinations when and if he chooses, in many cases with extreme carelessness, and with consequent educational bankruptcy. The Pennsylvania College Studies, made under the sponsorship of the Carnegie Foundation for the Advancement of Learning, give clear evidence of the enormous variation which we all know exists from one college to the next in the standards that are maintained. It is literally true that the lowest twenty per cent in one college may be superior to the upper twenty per cent in another college, although this would be a rare amount of disparity because in every class there are such wide individual variations.

¹ Life of Charles W. Eliot by Henry James, p. 361.

Not only have new courses and new curricula been established, but a number of other issues have been brought into college education to remind us of the natural individual variations between one student and another and, therefore, to break up the rigidity of course requirements for all. Intelligence tests have been introduced very widely, and students put in different sections with different amounts of work required for the same type and amount of college credit. Special groups, such as those needing remedial reading, have frequently been given credit for class work designed to make them ready for College. In recent years nearly every college has had some sort of professorial or departmental advisory system on the basis of which professors advise and frequently specify types of courses and loads of work a person is expected to take.

Personnel offices have quite frequently been accused of playing the nurse to inferior or lazy students who wish to change courses or look for special concessions under the greater flexibility. Cases of alumni pressure are not lacking. Colleges are too often evaluated on the basis of endowments or football scores. It is no wonder with all these variants that America is accused of complete laxity in its educational program, and that the "Hollywood" college is accepted by many outsiders as typical of what goes on in higher education.

I do not wish to condemn all of these indications of flexibility—I am merely calling attention to them. Along with other changes, colleges have introduced tutorial work, and various methods of getting credit without attending classes. Examinations for senior college status without necessary class attendance have been developed at the University of Chicago. The anticipatory examination program has been developed at the University of Buffalo—an accrediting of superior excess work done in high school on the basis of regular college examinations. Personally, I believe heartily in a system which makes it possible for superior students to get four hours of credit in the same course in which other students are getting two or three hours, on the basis of no extra attendance but much wider and deeper reading. I am convinced that so long as we hang on to the credit system we should be more willing to grant credit for bits of research or scholarly papers written entirely independently—perhaps during summer months quite apart from the university. Occasionally such a project may completely alter the student's drive and interest in further work in colleges or graduate school.

I see no objection to special types of junior college curricula for inferior students or those with special types of motivation, but I think we should invent new degrees for such students rather than degrading the A.B. I see no serious reason why each student should not have an entirely different curriculum from every other, provided it is well thought out and pointed towards a goal which he and his advisers recognize, and also provided the final A.B. degree is granted on the basis of thoroughly abstract and sufficiently broad linguistic training. One of the main abuses of the elective system—dilettantism and the drifting into “snap” courses—is partially guarded against in most institutions by regulations in favor of department concentration. It could be further remedied by overhauling or strengthening entire departments.

But although we have been aware of this increase in college flexibility, in recent years many other changes have suggested an effort to tighten up and become more disciplined. We have not gone the way of the early Oxford tutors who watched the hours of sleep and expense accounts of their students, but we have tended to put them into quadrangles and regulate class and laboratory hours, and textbook assignments to such an extent that very able students often find their scholarly fervor chilled by unnecessary routine. We have given much more attention than formerly to entrance standards, and many colleges are quite rigorous in the admission of students to certain curricula. We have all become respectful, if not fearful, of the registrar's office, as it and the treasurer's office are apt to be the only real business offices of a college. Instead of getting away from credit hours, we have mechanized them more completely and introduced not only a standard 120 or more hours of credit, but also quality point systems where average marks must be above a “C.” We have relaxed a good deal on chapel and class attendance over the old New England college regulations, but we have held students, in many instances, to certain departmental regulations and other faculty requirements for divisional spread. In many cases, we have brought in a certain rigidity in separating college from high school credits. For example, no excess work in high school can be counted towards college credit in the great majority of colleges today. No one may take a passed course over twice to raise his grade and get any credit for his second attempt, even though the first grade was obtained with handicaps of illness or necessary employment. In nearly all colleges four years is accepted as the standard time and

at least four years of tuition must be paid into the treasurer's office. If the mechanics of a college are taken care of all is considered satisfactory.

Another influence has become more and more evident of recent years, largely, no doubt, as a reaction to the liberalizing influence of President Eliot. This is the rise of the new humanism under the inspiration of Irving Babbitt, Paul Elmer More, and more recently of President Robert Hutchins of the University of Chicago. These men are pleading for a revival of what they consider basic learning in this country. In the main they urge a classical background and mental discipline of a more rigorous type. Says Professor More, "The cause of humanism is identical to free will and purpose as the traits which distinguish humanity from the rest of nature."²

There has come to be almost a complete separation of viewpoint between these exponents of the classical tradition and many of our modern educational psychologists and other social scientists, in spite of the fact that Dr. Edward Thorndike and others have piled up extensive evidence to support their views that learning in one field does not normally carry over to an entirely different field and that traits of character such as thoroughness and integrity of scholarship can be developed in fields other than classics. The studies of Dr. Learned and Dr. Wood for the Carnegie Foundation for the Advancement of teaching show that of all fields the department which in 49 Pennsylvania colleges has attracted the most superior students from the point of view of all around culture—as measured by the 12 hour general examination—is that of physics. The physical sciences stand at least as high as the ancient and modern language fields. Those fields which attract students of the least general culture and probably lowest ability as measured by many tests are the social sciences. The new humanists, therefore, are unquestionably aiming their guns primarily against the social science fields. They feel that many of the ablest minds are being enticed into easy subject matter fields. They detect the enormous overlapping of courses in Sociology, Psychology and Economics—to such an extent that the same topic may be covered quite extensively in four or five different courses.

In all this turmoil what can the individual student do, and what can the American college do, to develop a more thorough and more

² On Being Human, 1936.

respected educational program? Both registrars and personnel advisers are involved.

One cannot separate college administrators sharply into registrars, personnel advisers and others. It is safer to make the separation by functions. As I see it, the function of the registrar is to administer faculty rules so far as curricula and marking systems are concerned, to record grades and determine credits for graduation. The personnel function, in my estimation, is that of guiding and otherwise dealing with students personally and as individuals. This may be carried on by the registrar or by a separate office.

The registrar function, as I have suggested above, will tend to be on the side of high standards and controls so that the bachelor's degree has significance. The personnel function is conversely interested primarily in flexibility, in treating each individual somewhat differently—always hoping that the sum total of courses will somehow balance up about the same for each person.

As I see it, there is a dilemma between these two functions. Those of us who try to carry out some aspects of each function—e.g. sitting on committees determining admission or probation policies, and also counselling individual students regarding freshman or sophomore courses—find this conflict of impulses within ourselves.

The average adviser, whether he functions as a personnel officer, registrar or faculty consultant, has been accustomed to use a set of vague moralistic reminders: "You'd better get to work." "Why don't you form more regular habits?" "You're not spending enough time on your work." And so forth. One student told me recently that he had made so many resolutions of a general nature that a new one didn't have any value. He found that the only way he could improve was to "sneak up on" himself. In this way he got away from his ordinary habits of work.

The student is vaguely confused by many issues. He hears various reminders of humanism and also of the new educational psychology, or progressive education (with its emphasis on working only when you are interested); yet he knows that his main job is to pile up credits and pass courses. There have been very few reminders of the more important objectives of college education, that is, the ability to think abstractly, to express oneself clearly, and to solve problems that are of vital present or potential importance in the community. Our colleges have not given much attention to these objectives in any concrete form. The A. B. degree has stood for four years, and

120 hours of credit with a "C" average. We have introduced many regulations but not always such as to encourage enduring scholarship.

What will be America's answer to the dilemma in which we are placed today, that of trying at the same time to hold up high standards of work and yet to get rid of certain artificial rigidities which do not necessarily produce good scholarship. Merely passing separate courses is not very satisfactory. I asked a very brilliant girl majoring in mathematics in a midwestern college why she didn't take the comprehensive examination for honors. She replied, "Why should I do the work of an honors student when I can pass courses with A grades and get the Phi Beta Kappa Key anyway?" On the other hand, we are not likely to go back to the old classical traditions. Our learning is too dynamic and we are finding out too much that must supplement the old to fall back on the ancient verities, as they are sometimes called. There will always be much variety in the way that people learn, and in what constitutes scholarly achievement.

The only satisfactory resolution of that conflict must, in my estimation, come through examinations, as expressions of the most important goals of a college. If we know that students can express themselves clearly, on important topics, with a background of scholarly achievement, why should we worry about years in college or number of credits or types of courses taken? Certainly Swarthmore College has not suffered from her abandonment of the credit machinery for honors students. Nor are people likely to scoff at the University of Chicago degree.

Two movements developed almost synchronously in this country have pointed the way to more definite, if not higher, objectives of education. Both of them deal with improvements in examinations. One is the well-known, widely developed short-form objective examining technique. It has spread rapidly through the high schools and colleges of the country and threatens to choke out the older forms of essay and discussion questions in many of our larger universities. Some of us do not like these short-form objective types of examination (true-false, multiple choice, completion and the like), but I think we should recognize two very important assets which they do have, in addition to their greatly reputed reliability of grading. In the first place, they are out in the open, available for the inspection of all people. Secondly, they have the aspect of universality, if and when they are carefully prepared. The grading

can be done impersonally, and of course the larger nationally or state administered examinations are in fact externalized examinations throughout.

These two attributes of examinations—externality and availability for inspection—are new in American education. They make it possible for us to see what we are doing, and they add respectability to earned achievement. We can measure the standards of a college in terms of a perfectly definite amount of achievement, and compare colleges one with the other, even if the type of achievement is not always in line with some of the objectives of education—such as original expression and the capacity to organize thinking.

The second important innovation in examining in this country has been the comprehensive terminal examination at the time of graduation. These examinations have almost always been made up of essay and short discussion questions, and are similar to forms used in English universities for over a century for honors ratings. These terminal examinations—usually offered by departments to their majors—are now required of all graduates in a hundred or more colleges, and the general reports are favorable in affirming that they strengthen the work of the last two years and clarify the goals of the college.

As in the case of the short-form objective examination, the comprehensive essay items become known. They are also out in the open, and in my estimation should be on file and given wide publicity so that students and professors and outsiders can be aware of the types of questions which are likely to be asked in the future. The external and impersonal grading of examinations is another thing entirely; only a few colleges have seriously attempted outside impersonal examining. Because the examiners are ordinarily the same men as the teachers, we do not respect the results of grading much more than when the examinations are ordinary course tests.

If we are to pin our hopes on examinations more completely, we must see to their improvement. The questions, and even the replies of pass and superior students should be available for inspection by outsiders. There must be many thoroughly respectable examinations, with different forms of expression and a variety of objectives represented, so that we can really trust the results. A part of these examinations should be set and graded by impersonal examiners (those who have not taught the student concerned).

We have found with our anticipatory examinations for superior

high school students at the University of Buffalo, that the mere widespread distribution of syllabi and of examination questions has aided immensely in the process of articulating the high school students. It has not only induced college professors to be more careful and thorough in setting examinations which are at least as difficult as those given in college for credit, but it has also stimulated many high school teachers to organize their courses differently and to deal with a few superior students tutorially. When college professors have found that even good high school students can pass their examinations, they have naturally strengthened their own courses and all future examinations in them. Our registrar's office at Buffalo is doing a valuable service of collecting and filing all final examinations of courses as well as our final comprehensive examinations.

By way of a summary, if President Eliot were to make a survey of college achievement today he would doubtless be surprised if not annoyed by the great variety of curricula, course units and levels of accomplishment represented in our colleges. He would realize that the elective system can run amuck, and that complete freedom on the part of professors is a dubious solution. He would also be irritated by many artificial regulations and impulses in the direction of formal discipline. I suspect that he would find hope in some of our examining developments, since they allow extensive freedom and yet are directed towards a respectable and useful goal.

Procedures in Certification of Teachers

PANEL DISCUSSION: ROBERT L. WILLIAMS, *Chairman*

The modern, complex university is called upon to furnish various individuals and agencies with a minimum of twelve to fifteen thousand transcripts of students' records each year. The reproduction of these records is an enormous task, regardless of how simple the procedure may be. Fortunately within the last few years, the development of photographic devices and the continued use of the blueprint and other direct-contact methods have made it possible for records to be reproduced in a manner which gives a true reproduction and yet minimizes the labor cost in the registrar's office for this service. These newer devices, however, are useless unless records made with their aid are acceptable to the various agencies requesting transcripts.

The purpose of this morning's report then is to lay before the American Association of Collegiate Registrars statements of the policies of each state in the union for guidance in issuing transcripts for the purpose of certification of teachers. It is hoped that the discussion following this report, which will be led primarily by registrars from a few selected states, will do much toward clearing up the problem involved.

I might digress for an additional moment to indicate that most of these thirty-six states that are willing to accept transcripts do want the individual applicant to fill in a form giving personal data and personal history, and that is sent to the registrar's office; the registrar's office simply attaches the transcript or blueprint to the personal data blank and sends it on to the State Department of Education. It makes it much simpler for these state departments to get everything about one applicant in one letter rather than to have the personal data come in in one letter followed, two or three days later, by the transcript.

In the following table, the states are classified according to their policy in accepting transcripts on regular forms.

I have arranged to have representatives from most of the states which have replied negatively, discuss at this meeting the problems which prevail in their states. Miss Robertson, from the University of Alabama will open the discussion.

MISS ROBERTSON, University of Alabama: At the University of

Alabama last summer, the making out of certificate applications was transferred from the office of the College of Education to the General Registrar's office. The assistant in the office who had charge of this work from time to time made suggestions for a simplified form. She was told to incorporate those suggestions in a rough draft which would be submitted to our State Department of Education. Early in January, we called at the Department of Certification. The Department listened and looked with favor upon the idea of our discussing at our April state meeting, the Alabama Registrars' meeting, a simplified certificate form.

TABLE I
STATE DEPARTMENTS OF EDUCATION WHICH ARE WILLING
TO ACCEPT TRANSCRIPTS IN LIEU OF SPECIAL
CERTIFICATION FORMS

Alabama	No	Maine	Yes	Ohio	No
Arizona	Yes	Maryland	Yes	Oklahoma	Yes
Arkansas	Yes	Massachusetts	Yes	Oregon	No
California	Yes	Michigan	Yes	Pennsylvania	Yes
Colorado	Yes	Minnesota	No	Rhode Island	Yes
Connecticut	Yes	Mississippi	Yes	South Carolina	Yes
Delaware	Yes	Missouri	No	South Dakota	Yes
Florida	No	Montana	Yes	Tennessee	Yes
Georgia	Yes	Nebraska	Yes	Texas	Yes
Idaho	Yes	Nevada	Yes	Utah	Yes
Illinois	No	New Hampshire	Yes	Vermont	Yes
Indiana	No	New Jersey	Yes	Virginia	Yes
Iowa	Yes	New Mexico	Yes	Washington	No
Kansas	Yes	New York	Yes	West Virginia	No
Kentucky	Yes	North Carolina	Yes	Wisconsin	Yes
Louisiana	Yes	North Dakota	No	Wyoming	No

At that meeting, no definite decision was reached. However, Dr. Abercrombie, of our State Department, discussed the matter with us and very graciously listened at length to our frank discussion, and it was agreed that a joint committee representing the registrars and the State Department of Education would work during the coming year with the hope that at the end of the year we will be able to work out a simplified form and a simplified procedure which will be satisfactory to our State Department of Education as well as to all university registrars. So we hope that next year we will be able to report to you that the State Department joins us in saying that the old order should change, yielding place to the new.

MR. MCQUITTY: University of Florida: I am glad to make a promising report from the State of Florida in this connection. Since

Dr. Williams made his study, we have elected a new State Superintendent of Public Instruction and we contacted him about this point and he has promised to do something about it.

Now, the encouraging thing about it is, he made his promise after he was elected and not before, so I think we can look for an improved situation in regard to the certification of teachers for the State of Florida.

MR. TUTTLE, University of Illinois: For a great many years we have struggled in Illinois with one of the most atrocious institutional credit blanks in the country. We already have made a time study in my office and found that it took a trained girl about 35 minutes to fill in one blank. We are filling in between 600 and 700 of these blanks a year. Thus, the job was requiring time equivalent to forty working days of one person, or a month and one-half of working days in any one year.

About two years ago, the Illinois Branch of the American Association of Collegiate Registrars took cognizance of this situation by appointing a committee. I was not on this committee, and its Chairman, Dr. Serenius of Augustana College, really should be making this report, because what has been accomplished in Illinois in reference to this matter is the result of the hard labors of that committee. The Committee made a progress report last October. In addition to making a progress report, it also informed the Association that it had invited to be the guest speaker at the dinner, the Secretary of our State Department of certification. He was present, met the registrars, and spoke. I judge, from what happened thereafter, that he was fairly favorably impressed with the idea that we were, after all, a pretty decent group of people.

Thereafter, the Committee was enlarged to include the registrars of the three larger universities in the state and of several of the smaller colleges and universities in or near Chicago. We had two meetings. At the first session we put the proposition frankly up to Mr. Ingle, who is the Secretary, that we wanted to certify candidates on the basis of the transcript alone.

The Secretary of the Board expressed his wish to meet our desires as far as possible and then explained some of the difficulties which are inherent in his office, set-up with reference to administering the law. He told us quite frankly that he did not have the personnel and that he couldn't get the personnel, that there was no money available, and that he felt that he must, in view of the situation, in order

to efficiently carry on the work of his office, he must ask for something in the way of further information.

He convinced us on the matter that it was necessary for him to obtain the co-operation of the teacher training institutions to the extent of furnishing something more than the transcript alone, and he agreed that he would endeavor to work out a blank to be presented along with the transcript of record, which would contain only the minimum essentials, and that he would be glad to meet with us again when such a blank could be presented and discussed.

Mr. Williams attended our second meeting, the result of which was the adoption of what he calls in his paper "an unusually simple blank." I should say if there is any lesson in our experience that may be of benefit to other states, it is that sometimes it pays to sit around a table and discuss opposing views with the other fellow, laying all the cards on the table.

MR. MCGRAW, Concord State Teachers, West Virginia: Having done some work in the Department of Certification and having been a registrar, I think I can see both sides of this subject. Probably, we should first be sure that all records submitted by registrars can be interpreted.

In our state, we require certain subjects in fields; we certify by fields instead of subjects. For example, the average transcript will say so many hours of History. It doesn't say whether it is American history, European history, or English history. Our state requires six hours of political science, three of which must be American Government, and three, state government for certification in the social science field. This is typical of the distribution requirement for all subject fields.

Very often, in evaluating transcripts for certificates, it is necessary to write to registrars to see what certain courses actually are. In fact, the information on some of the transcripts does not assist one to find an explanation in the catalogue. If we would put upon our transcripts, more information, then there would be no question about our Department's accepting them.

We have another regulation which says that a teacher must be of good moral character and requires somebody in the institution to so certify.

I have always been of the opinion that graduation from an institution was evidence within itself that you were of the type and the character and had the proper reputation for being a teacher.

MR. MC WHINNIE, University of Wyoming: The problem in Wyoming was taken up with Superintendent Gage, Commissioner Markley, and Deputy Superintendent Outson of the State Department. It so happens that both Mr. Gage and Mr. Outson are graduates of our institution and we were able to at least enlist their encouragement and their sympathetic attention to the problem.

Mr. Markley replied to the inquiry sent out by Mr. Williams and pointed out that the quotation which Mr. Williams has used here this morning wasn't necessarily intended to specify that Wyoming would not accept the blueprint. He simply wished to point out the particular factors with which they would be concerned; and that if the blanks satisfied these needs they would be willing to accept the blueprint form.

Mr. Outson, the Deputy Superintendent, pointed out that the Wyoming form which they now use, is $8" \times 9\frac{1}{4}"$ in size, and when folded becomes part of a Kardex record form and is filed, in that folded form, with the Kardex record. The standard size, $8\frac{1}{2}" \times 11"$, transcript form would not satisfy that need.

Mr. Gage pointed out that they would be glad to revise their particular form, making it more acceptable to our institution, since the greatest number of their cases came from our institution. He didn't think the State as a whole could get together on any general form and, until they did, the problem was not up to the State Department.

He did promise open-mindedness on the question and a willingness to consider some general form if, after this meeting, a group from the Association is willing to present it.

MISS COCKINS, Ohio State: I have had two conferences with the State Department. Mr. MacNutt seemed to feel that for applicants from outside the State of Ohio, the matter should be a matter of reciprocity between the State Departments only; that where the candidate presented a blueprint or a transcript of his record to the State Department and he had received a teacher's certificate, if he presented to the Department in Ohio the teacher's certificate from the state and a transcript of his record, it would be sufficient. Where the requirements in Ohio are not identical with the requirements in other states, Ohio will not quibble over a few hours one way or another in the matter of majors and minors. The agreement, however, will not be with individual institutions but with the state departments only.

Mr. MacNutt stated further that when certificates came from applicants who had been out of college a number of years and if catalogs are not available, it is impossible to translate the old transcript into the requirements of today.

MR. MURRAY (Formerly Director of Certification of the State Department of Education in Indiana and now Registrar of Ball State Teachers College, Mr. Murray has worked out a permanent record card which can be obtained from him by request. This form combines the experience of a man who has worked on the problem of certification both in a State Department of Education and the Registrar's Office.):

Is there a representative here from a registrar's office who would say that he is not really busy in his job? Then I will report for the office of the Director of Certification that his offices are just as busy.

I probably should speak more from the standpoint of a Director of Certification than as a registrar, for I might know our Indiana set-up a little better than I know the registrar's office at Ball State Teachers College, because of the time that I have spent at either position.

Indiana prefers the transcript of credits rather than to have an out-of-state institution attempt to break down the transcript into the subject-matter groups required for certification. I suspect that a new Certification Director coming in and answering the questionnaire that was sent out, thought that it would be very fine and very desirable for the institution to make those groupings for him. This would relieve him of a great deal of work. In his response to your questionnaire, there are certain difficulties he pointed out. If you will follow his recommendations or the summarization of Mr. Williams's report and arrange your transcripts accordingly, you will have very few questions on the certification of teachers in Indiana.

In the little study that I tried to work out, registrars over the country were very kind and considerate in sending me a transcript, at my request, for certain individuals who were licensed, and they did it without any additional transcript fee. I appreciated that.

In conclusion, I would like to say that you may, on page 5 of the manuscript which Mr. Williams presented, change Indiana to "Yes" rather than "No" and I assure you that it will be in harmony with my successor, Mr. Mahan.

MR. WEST, University of Minnesota: I agree with the criticisms of these state departments that say the registrar is best able to

interpret his own records. I think that is correct, and I would like to present just for a minute what I consider the two sides of this question. One is, what are the principles on which our transcripts or records now divide? We design them ourselves because we think they are the best way for us to check against faculty regulations, curriculum requirements, and requirements for graduation.

We must remember that the State Certification forms were made up on entirely different principles; they are governed by certain state laws and they are governed by certain rulings of their own State Department and by interpretations, so it is natural that a form which is best suited for their purpose may not be the form that is best suited for our purpose at all.

We know that we have never been able to arrange a uniform transcript blank even among our own institutions, where we have more or less common purposes and common understandings, and I am rather inclined to think that we should go a little way with the state departments and not urge too much that they adopt our form.

MR. CANADA, University of Missouri: In protesting the form used by the State Department in Missouri, I yield to no man and to only one woman, and that is the girl who fills them in. Indeed, I have been protesting our little form for eight or ten years and I suppose the net result has been that the form has gotten a bit worse.

The situation in Missouri is largely that of personnel. The State Department, when this form was adopted several years ago, felt that the institutions were better qualified to interpret their records than members of their own department. They felt that they were short-handed and, moreover, our Department is a political Department, changing every few years, and they felt that we were not only better qualified, but perhaps there would be less pressure exerted upon us to recommend prospective teachers than there would be on the State Department.

We do feel that it is a lot of work and that it is asking much of you to fill in our form, but I don't know that our form is likely to be changed soon.

SECTIONAL MEETINGS

Section A, Universities, Professional and Technical Schools

R. M. WEST, CHAIRMAN

PANEL DISCUSSION: *New Developments in University
Administrative and Educational Policies and the
Registrar's Office*

ADMISSIONS TO THE GRADUATE SCHOOLS

G. P. TUTTLE

If there is to be selective admission anywhere on the University front it ought, it seems to me, to be first of all at the graduate level. There if anywhere there should not be waste of faculty effort, of funds, and of equipment upon the mediocre student. What is the practice of Graduate Schools in this matter? We find here no elaborate testing machinery, no comparative rating scales, but selective admissions, individualized by careful scrutiny of the facts in each case. Recently I have been in correspondence with a number of graduate schools in an effort to get information which I might present this afternoon. I have received pretty complete information from twelve graduate schools located at institutions throughout the country, that are members of the Association of American Universities. In addition I am personally very familiar with the practices of the Graduate School at the University of Illinois, since there the Registrar is admissions officer for the Graduate School.

In nearly every instance the documentary evidence required is the usual transcript giving in detail the undergraduate record, plus in a few instances an application blank filled in by the candidate. In one instance, and only one, are letters of recommendation required. It is quite evident that applicants get into or do not get into graduate schools almost entirely upon the basis of what their undergraduate records disclose.

Ordinarily the candidate must have a degree from an "accredited institution." There is nothing like complete adherence to this requirement, however, for in a number of instances it is indicated a candidate with a brilliant record from an unaccredited institution is readily given an opportunity to try his hand at graduate work.

It is perfectly evident that the mere holding of a degree will not of itself admit to any graduate school. Quality of work done is con-

sidered to be of first importance and graduate schools do not hesitate to refuse admission to applicants whose undergraduate record fails to show promise of success in graduate work. And that promise must be evident in the record. Importuning of some over enthusiastic professor on behalf of a student whose record is poor will do little good, for as one institution puts it, "Letters of recommendation do not often tip the scales in favor of a doubtful candidate."

Not many graduate schools have definite rules for the exclusion of candidates whose work is of poor quality. That is to say, more often there is careful scrutiny of the record and refusal or acceptance on the individual basis without any statistical compilation of average grade, or percentage of high marks or number of low grades. In some instances the record is studied both by a general administrative officer, most often the Dean of the Graduate School, and a member of the department in which the applicant plans to do his major work.

Occasionally definite rules of procedure are in effect such as:

Refusal of students with less than 50% A or B grades, a definite grade point average, average of B or better in field of specialization.

More often, however, the basis of refusal is stated more generally as:

Excessive number of low grades, unsatisfactory scholarship regardless of where the work is done, lack of distinction in undergraduate work.

A second item, discoverable also, from the transcript of the undergraduate record, that receives careful scrutiny in connection with admissions to graduate schools, is the applicant's preparation in his chosen major field or field of specialization. Here the study is most likely to be made by the department concerned and the decision is made both on the quality and character of the work done. Sometimes the applicant must have a reading knowledge of French or German as well as reasonable preparation in his major field.

A number of graduate schools will admit the applicant with some deficiencies in his major field if his general scholarship is good. Where this is done he is required to take extra work without graduate credit.

Finally, there is the question of candidacy for a degree. In a large majority of graduate schools, admission does not imply candidacy for an advanced degree nor give any right or claim to such candidacy. This is true in nine of the thirteen graduate schools whose

practices have been reviewed. In other words, after the original hurdle of admission has been made, the student still must show by actual performance in graduate work that he is capable of proceeding to a degree.

With reference to this matter of candidacy for an advanced degree, a number of graduate schools have more than one classification on original admission. Applicants with strong undergraduate records are admitted to what may be defined as full graduate status, with every expectation of becoming candidates for degrees; or if their undergraduate records, while not strong, are not poor enough to form a basis for denial of admission, are admitted to special classification with the understanding that later reclassification as candidates for degrees is extremely doubtful. This same sort of classification is used sometimes in two other types of cases:

1. Candidates with brilliant records from "unaccredited institutions."
2. Candidates with inadequate preparation in their major fields but with good records otherwise.

Of course, in such cases, candidacy for a degree is not so remote a possibility.

Summing up then, the essential factors entering into graduate school admissions seem to be:

1. A degree from a recognized institution, but with due allowance for outstanding students from other institutions.
2. A quality of scholarship at the undergraduate level that gives promise of success in graduate work.
3. An adequate undergraduate program in the proposed field of specialization, sometimes with an additional requirement of a reading knowledge of French or German.
4. Withholding of actual candidacy for a degree until the student has demonstrated his capacity by actual performance in the graduate school.

CHAIRMAN WEST: On what basis do you admit those coming from unaccredited colleges?

MR. TUTTLE: We have our own scheme of accrediting institutions through a committee called the Committee on Admissions from Higher Institutions, which reviews data about institutions that are not recognized by the Association of American Universities or by any regional association. We make our own rating of those institutions. We will sometimes admit a candidate who is from an institu-

tion that even our Committee does not rate, provided he shows a strong record. In practically every instance a definite program is arranged for him; he is not given full graduate standing but he is given an opportunity to try what he can do.

CHAIRMAN WEST: Do you have any tests at the graduate level for these people coming from unaccredited schools?

MR. TUTTLE: We do not have.

MR. NELSON: What do you do with the summer school student who comes and maybe takes only one summer term, then decides he doesn't necessarily care about going on to an advanced degree, but who must get graduate credit for purposes of certification?

MR. TUTTLE: His registration with us would depend entirely upon the character of work he decided to do during the summer. He would be admitted to the Graduate School if he were to register for a graduate program.

MR. NELSON: Would you require him to submit all his undergraduate transcripts?

MR. TUTTLE: We would require him to submit certification that he had the degree but not necessarily the transcript.

THE EVALUATION OF EXPERIMENTAL ADMISSION AND CURRICULAR ADJUSTMENT IN THE PREDICTION OF SUCCESS AT THE COLLEGE LEVEL

C. H. MARUTH

Basically, the problem of education, particularly the problem of selection and retention of the student for work at the college level, must be determined by the philosophy of the institution and what constitutes education at the higher level, that is, whether that shall be education for all, or whether education for the selected few.

This philosophy, in the case of the tax-supported institution of higher education, is influenced by political factors demanding co-ordination between the secondary and collegiate levels, because the support enabling each of these institutions to fulfill its destiny is determined by the will and the ability and the intelligence of the taxpayer and his authorized agent, the legislature.

This political co-ordination means that in the case of the tax-supported institution for higher education, there is a definitely limited opportunity for selection, at least at the freshman level. It

further means that the educational policies of the state universities with respect to admissions will differ from those of the private institutions. It is perhaps this very limitation of opportunity for initial selection that has challenged these institutions to inquire as to whether or not the long accepted standards for admission are the only criteria necessary for upholding the standards of the institution. It leads to the speculation that if, and when, we arrive at the pearly gates, St. Peter will be too critical of the road whence we came.

Now, let us for the moment, as examiners and registrars, sit with St. Peter at the pearly gates, the portals of our respective universities, even though in an atmosphere of mixed metaphors. In the far distance we see approaching a cavalcade of supplicants who, upon nearer approach, we discover are crusaders in search of the Holy Grail, a college education.

The first, being questioned by St. Peter as to whether or not he has the prescribed good deeds, answers, "Yea. Gaze upon my high school credits." And St. Peter, upon closer scrutiny, seeing that they are in order and knowing the signer as an honest man, passes him through the pearly gates.

The second, upon like questioning, answers, "Nay, I have not the prescribed good deeds, but I offer these good deeds as substitutes—a good mind and a desire to learn."

St. Peter for the moment is nonplussed but, turning to his Good Book, the catalogue, he finds not therein the acceptance of these good deeds as substitutes and so this man is turned away.

This, then, is the dilemma. Is the college or university to accept only the standardized, formal preparation for admission or is it to recognize that there is no royal road to learning? I do not mean by this that the college standards must be lowered to those of the secondary level nor, reciprocally, that the secondary schools should not use every means at their disposal to deal effectively with the students at the age and physiological level for which these secondary schools were designed. But I do wish to raise the question as to the reliability of this standardized, formal secondary preparation so long insisted upon as being the best or even as being a good prediction of college success.

At this point I want to call upon my colleague, Dr. D. D. Feder, to give you the results of what he has discovered in the evaluation of admission criteria for prediction of success at the college level.

DR. FEDER: A survey of a large number of studies from all types and sizes of institutions in all geographical locations, including those of our own university, has yielded comparable results concerning the effectiveness of the record of high school achievement in the prediction of success at college. The findings are, in general, of two kinds.

First, standards of quality vary so widely from school to school that the record of achievement in high school is not a reliable index of achievement in college.

Second, no specific courses or patterns of courses taken in high school offer greater assurance of success in college than any others.

The second proposition that we have to deal with has reference to the objective measurement of aptitude for college work, which has progressed to the point where at present it is possible to predict success in the first year of college achievement with a correlation of 0.75. Typical batteries of such tests are the Minnesota College Aptitude Test, the Co-operative Test Service, the Regents' Examinations and the Iowa qualifying Examinations for Freshmen.

Naturally, we are more familiar with the latter battery, which is composed of the Iowa high school content test, the Iowa silent reading test, the mathematics aptitude and English training tests of the Iowa Placement Examination series.

These tests are pitched exactly at the level of the entering freshman and they lose markedly in predictive validity when used much before or after the freshman year. The composite score which may be derived from such a battery and the component scores are far more valuable for college purposes than a single general mental ability score, because they take direct account of the various abilities involved in successful college work. Actually, some 18 years of study and experience indicate that for aid in selecting and admitting students to afford a basis for the prediction of the character of work students will do in college, and to give direction and reliability to the guidance of students, such tests constitute the single best tool available.

After the first year, the picture changes somewhat, because then the best index for predictive purposes is the achievement in the first year. The average student seems to strike a best pace and best level of achievement which is characteristic of all his work throughout the remainder of his college career. This is indicated, among other things, by the fact that the average grade point average for

the freshman year at the University of Iowa is 2.02; in the sophomore year, 2.04; in the junior year, 2.224; in the senior year, 2.26. The element of selection which takes place between the sophomore and the junior years tends to result in a junior class and a senior class of increased ability.

In present educational guidance practice, the high school record gains in value and significance through disagreements with students' test records. Such discrepancies may reveal special factors which will have significant effects upon predictive figures. At best, however, both high school transcripts and college entrance and qualifying examinations must be regarded as temporary expedients, to be supplemented and extended in the future by complete scientific, cumulative records of the personality, abilities and achievements of each student who seeks entrance to college.

A five-year study of students who were permitted to enter the University of Iowa, although deficient in general or specific entrance requirements, revealed that such students constitute a group of much lower ability, on the whole, than the normal entering class as measured by the Iowa qualifying examinations.

Further, that as compared with non-deficient students, that is, as compared with the students who presented a complete and fully acceptable transcript of high school credits, the deficient students achieve approximately as well in terms of grade point average in the first year, but they do not stay in school as long nor do as many obtain degrees. They are, on the average, considerably older at the time of entrance. They have, on the average, been out of school for a longer period between high school and college. That, further, they come in larger numbers from the large city high schools and out-of-state schools.

By way of summarizing this particular study, we may point out that, on the whole, students with college entrance deficiencies constitute an unique group whose educational problems cannot be solved by any arbitrary rules or regulations but demand constructive educational guidance.

In this presentation I have stuck closely to factual matters, without any references to the effects that such things may have upon the specific practices of any college or university.

CHAIRMAN WEST: I agree that there should be liberality in the admission of students who have not met the formal requirements, but the admission officer should also have authority to deny admis-

sion to the student who may have met the requirements but who, in his opinion, would not make a good student.

MR. MARUTH: I might add, Mr. West, that at the University of Iowa, as a result of these studies, the faculty of the College of Liberal Arts now admits any graduate of an approved secondary school irrespective of the pattern of subject-matter which he has, except for the fact that they will not get away completely from the long-accepted standards; and I am not sure that it is wise to get away completely from sequential requirements; but such a student with entrance deficiencies and, as I say, any graduate of an approved secondary school in Iowa may be admitted to the University of Iowa no matter whether he meets our specifications for admission or not.

MISS GEORGE: What do you do for the better students?

DR. FEDER: For the superior student, that is, both in the terms of high school entrance requirements and in terms of the freshman qualifying examinations, there are a number of curricular adjustments which are made, permitting him in some departments to do as much as three years of work in two years. There are special honors courses, special ability sectioning; there is a bonus system whereby a student may receive grade points in addition to the normal load which he is carrying in terms of his achievement, which will hasten or facilitate his graduation and entrance into professional and graduate work.

MR. FICHTENBAUM: Mr. Maruth stated that any person over 21 years of age might be admitted to the University of Iowa. I wonder if he meant it quite as broadly as that? Is not some check-up made to see that he has done some work to compensate or do you just take anybody who comes along. If he is past 21? Is age the only criterion?

MR. MARUTH: I think it is a rather well-established principle in a democracy that all persons who have completed satisfactorily one level shall have equal opportunity at the next level, but not necessarily will they have equal achievement in the next level.

I don't believe that any institution would set up standards for admission in terms of merely demanded political co-ordination. They certainly are based upon educational philosophies and perhaps the answer to your question is that in practice, in the extreme case, we must admit under our present regime the student who applies for admission and who is over 21 years of age and is able or is entitled to carry the regular freshman course.

There aren't many of such people, because when a person gets to be 21 years of age, he has to think about making a living, and most people who reach that age are those who have gone through the normal secondary preparation. But such a student is admitted.

INSTITUTIONAL REORGANIZATION

KATHRYN GEORGE

Last summer the offices of the Dean of Men and the Dean of Women, as such, at Northwestern were eliminated and the Board of Personnel Administration has been established to co-ordinate the various personnel units within the University, thereby assuring better service to the individual student and groups of students.

May I give you first a brief statement of the history of personnel work which paved the way for the establishment of this Board, the reasons for its establishment, its members and their functions, its general policy, and its advantages? Most of this material is taken from a report on Personnel Work prepared by Miss Grace Manson, who is Director of Personnel Research at Northwestern.

The Dean of Women's office at Northwestern University was established in 1873; the Dean of Men and the Personnel office in 1922. These three offices grew independently, without specific direction and without much concern for each other. Thus, there was a three-way division, two-way on the basis of sex and the third way on functions. There was a definite lack of common policy and this led to confusion in lines of authority.

Then, to remedy this situation, the present Board of Personnel Administration was established in July, 1936. This is an amalgamation of the Personnel Office and the offices of the Dean of Men and the Dean of Women, with other student contact officers as members of the Board. Organizationally, this new Board is an adjunct to the office of the President. The Board consists of 14 members, with the Assistant to the President acting as Chairman. They are:

Four General Counselors (2 for men and 2 for women)

A religious counselor.

The Director of Dormitories.

The Director of Student Finance.

The Director of Personnel Research.

The Executive Secretary of the Board of Supervision of Student Activities.

The Director of Placement.

The Director of Admissions.

New Student Secretary.

Registrar.

Two of the counselors, one man and one woman, are particularly charged with organizational counseling, with problems relating to group life on the campus. The other two general counselors deal more with the personal problems of the individual.

The offices of these four counselors are adjoining and the mere fact that their offices are so arranged, with the same clerical staff more or less serving them all, has resulted in close co-operation, uniformity in policy, and has avoided duplication of effort.

The Executive Director of the National Council on Religion in Higher Education is on our campus this year to study the undergraduate religious situation. During this time, he is acting as Religious Counselor and as a member of the Board of Personnel Administration. There is at present no provision to provide permanently for this function.

The Director of Dormitories is charged with all matters pertaining to the business management of both the men's and women's dormitories and the commons.

The Director of Student Finance is charged with the administration of all student financial obligations, including the issuing of student bills, supervision of all types of rebates and loans. Scholarships, while granted by faculty committees, are cleared through his office.

These two officers maintain a close relationship for the Board with the Business Office but conduct their affairs with due regard to the fact that financial and living conditions are personnel factors of primary importance.

The function of the Director of Personnel Research is to determine the usefulness of diagnostic test methods and the relevancy of personnel information items, to evaluate remedial procedure and direct experimental work. The Director is also charged with all plans for training within the Division itself, in order that all individuals working within the Division may have sufficient theoretical background to insure an intelligent understanding of the purposes and methods of work.

Placement and vocational guidance is a recently added division. Under the jurisdiction of this unit comes student employment, voca-

tional guidance and placement of seniors and alumni. It is not the plan of the Director of Placement to take over the valuable work done by schools and faculty members but rather to supplement and co-ordinate this work where needed.

Health administration is in the hands of a university committee, of which the Dean of the Medical School is Chairman and the four general Personnel Counselors are members. This committee reports to the President's office through the Chairman of the Personnel Board, who shares the final responsibility with the Board.

The responsibility for registration and records, insofar as it is a university rather than a school function, is divided between the University Registrar and an officer in personnel records reporting directly to the Board. This differentiation is based on the necessity of keeping the academic and biographical records separate from the confidential personnel records.

The standards for the selection and admission of students, of course, are determined by the schools, but the processes are under the supervision of the Director of Admissions, who works in close co-operation with the Director of Personnel Research in the more technical problems arising in his office.

The Secretary of New Students is directly responsible to the Department of Development. However, he is an ex-officio member of the Board of Personnel Administration because of the close relationship between recruiting and admissions, orientation and training.

Liaison between the Board and the various school faculties is maintained through such individual members of the Board as are faculty members and through the work done by personnel workers and faculty members on joint enterprises.

The Board of Personnel Administration meets once a week. In the meetings, individual responsibilities and authorities are laid aside to obtain the fullest possible discussion from all angles of student problems. Out of this discussion come the personnel policies. The development of the student as an individual is the keynote of our personnel program.

The whole policy is experimental, not static. The Board is not handicapped by any stereotyped procedure nor does it intend to set up any such procedure. The advantages of this new set-up in Administration have been two-fold; the staff itself has benefited as well as the students. The student is no longer in doubt as to

where to present his problem. Formerly, he was torn between the Dean of Men or the Dean of Women and the Personnel Office. Often he went to both without telling either that he had done so, with the result that there was confusion and misunderstanding.

Now, if his problem has many angles, the counselor who is dealing with the case has the advantage of the experience of the other members of the Board and the facilities available through them.

Please do not misunderstand. All a student's personal problems and troubles are not aired and discussed by this Board. The student's rights as an individual are respected and his affairs are kept confidential by the counselors.

Now, as far as the members of the Board themselves are concerned, there has been a decided growth in their conception of the educational significance of their own particular jobs, in the conception of the needed correlation of all phases of work within the University. Under this new organization, there has been a decided raising of the esprit de corps, enthusiasm on the part of all, and excellent co-operation between the offices.

MR. MARMUTH: Do you entrust the actual guidance of students to members of the regular instructional staff in this counseling program or do you have special officers or counselors?

MISS GEORGE: Yes, in planning the student's academic program, in that the faculty member is the student's adviser, to whom he is supposed to turn; and then, if problems arise that the adviser doesn't wish to cope with, he reports the case to the general counselors, if the student needs additional help.

THE FOUR YEAR UNIT AT CHICAGO

ROY W. BIXLER

The plan which Mr. West is referring to is a plan to establish a four-year college which includes the last two years of the high school and the first two years of the Liberal Arts College, which we have been calling our college. I think it is fair to say that it is an experiment in the development of a program of general education. President Hutchins, whose leadership is responsible for the program, says that nobody knows what general education is and that we should try to find out what it is, and Mr. Judd, who is the Chairman of the Department of Education and whose influence has been rather large, I think, in the germination of the idea, says that there

is no general education beyond the elementary school in this country. So what the University is trying to do, I am sure, is to try to develop a program of general education.

The curriculum of the four-year unit is similar to the curriculum of our present two-year college. There are the four areas, the Humanities, Biological Sciences, Physical Sciences, and Social Sciences, which constitute the principal part of the four-year curriculum, approximately three-fourths of it. Then, there is an English composition requirement, as we have in the present College, a mathematics and language requirement, although the mathematics and language are usually taken care of in the case of students who come from the traditional four-year high school. The mathematics and language is usually taken care of there. So, as I say, approximately three-fourths of the curriculum will be devoted to these four areas.

The other fourth will be elective for the purpose of integration with the advanced work in the divisions and the professional schools. The college will be organized as one of the five divisions of the University, one of the five liberal arts divisions, with its Dean and an Assistant Dean, who is now the principal of the High School.

I think there is no question but that the University hopes to put the new four-year college in a building of its own as soon as that can be done, making it a completely separate unit. As it is organized now, the two years which constitutes our present or old college is on one side of the quadrangles and the other two years on the other side of the quadrangles in the University High School, and the principal of the University High School is the Assistant Dean, so that in that respect it is not very well co-ordinated at present.

The other feature which Mr. West mentioned, namely, the proposal to confer the bachelor's degree at the end of the four-year college hasn't been acted upon. It has been before the faculty and is still under consideration. I wouldn't know how to predict what will happen to that proposal.

CHAIRMAN WEST: Is this four-year college contemplating admission only through the University High School or will students be able to enter this from other high schools.

MR. BIXLER: Students will be able to enter at any level in the four-year college from any high school, just as they do now. As a matter of fact, even this year we have admitted some students from the Chicago high schools at the new freshman level in college.

IMPROVED STUDENT GUIDANCE AND THE
CO-OPERATION OF SECONDARY SCHOOLS
AND COLLEGES; METHODS IN
COLLECTION AND USE OF
PERSONNEL DATA

MR. MARMUTH

In a recent address at the University of Iowa in connection with a conference on higher education, President Conant of Harvard University made this statement:

"What is the machinery by which colleges play their part in selecting and training the most able young men and women? Clearly, it is our old heritage of stiff courses, a stimulating atmosphere making for hard work, examinations, rank lists and honor standings."

This is perhaps one way of stating how colleges and universities may fulfill their obligations of maintaining standards, but it is a pretty general term for purposes of discussion, and registrars, I believe, are not permitted generalizations without substantiating facts to back them up. And so I have divided this topic into really four subtopics for the purposes of discussion, so that each can be held up critically to the light for examination.

I would establish these bench marks in this connection: First, guidance; second, motivation; third, curricular adjustments to recognize individual differences; and fourth, measurement and recognition of achievement.

Thus, for discussion purposes, guidance would involve the recognition by an adequate advisory staff of the background, abilities and aptitudes of the students, with a means of follow-up for determining its success.

Motivation would imply the need of an instructional system flexible enough to meet the needs of the superior as well as the inferior group of students, such as sectioning on the basis of ability, etc.

Curricular adjustments to recognize individual differences would imply deviation from the standard courses, that is, honors courses, concentration of work in the student's interest fields, etc.

And measurement and recognition of achievement would embrace such prosaic things as grading system, quality requirements for graduation, announcement of honors, etc.

Now, clearly some of these questions lie almost completely with the instructional staffs of our institutions. Nevertheless, I think there are some, such as guidance, curricular adjustments and measurement and recognition of achievement, which are clearly within our field, and I should again like to call upon Dr. Feder, particularly with reference to the first and third of these, the place of guidance, and curricular adjustments to recognize individual differences.

DR. FEDER: At the University of Iowa, provision for individual differences has taken two major trends. We have already mentioned briefly some of the things which are done for the superior student. The following few possibilities I will simply review to call them to your attention.

There is the honor point system, which is essentially a bonus plan to permit graduation in less than four years and expedite entrance into graduate and professional study.

There is individualized instruction whereby students may in certain departments take as much as three years of work in two years' time by means of progressing at their own individual rate of speed and level of ability.

There is further provision by enrichment of the curriculum in certain subject departments, ability sectioning and special attention, guidance and stimulation for students in the highest 10% of the freshmen qualifying examinations.

Now, certainly equally perplexing are the adjustments necessary for the students of low ability. We have made an extensive analysis of eight years of performance of such students at the University of Iowa and have found certain facts with reference to their achievement. Students of low ability achieve best in those physical sciences which are for the most part descriptive and demand to a lesser degree manipulation and application of abstract concept. Thus, geology, zoology and botany seem to have more availability for the students of lower ability than have physics, chemistry, group sciences and mathematics. We use the terms "Availability" and "available" here to indicate the degree and possibilities for learning a given subject-matter.

Students of low ability are able to handle the subject-matter of first year courses in economics, American history and political science fairly well. They do not achieve so well in European history. French, Spanish and German seem to be of approximately equal

availability. In general, however, students in the lowest 20% have a great deal of difficulty with foreign language.

Success in graphic and plastic arts, home economics, and similar related courses of a more technical nature does not seem to be so clearly conditioned by general college ability, so that we cannot make a generalization in this case with reference to the low ability students.

Since speech and English are required courses, they perhaps do not enter rightfully into the present discussion. However, it is noteworthy that both of these subjects have been made markedly available by means of clinical and individualized procedures to students of low ability.

Now, with the foregoing and other results before it, a special committee on freshman studies undertook an experimental program with low ability freshmen, which is now in its second year. This experiment is designed to individualize the curriculum, guide the student and facilitate his adjustment in the university.

Some of the preliminary results of this experiment suggest that the faculty advisory system for students in the lowest quintile, that is, the lowest 20%, seems to be an effective instrumentality for adjusting such students to the college environment by the use of wise counsel at registration and guidance throughout the year. This is especially reflected in the superior achievement of the experimental group in the second semester of the freshman year.

Reduction of course load below the normal levels is not in itself an effective means of stimulating these students or bettering their achievement. Contrary to some of the earlier beliefs of the Committee, a full hour load, that is, the normal freshman schedule, in which there has been greater than usual adaption of the courses to the needs, interests and abilities of such students, was a far more effective means of raising their general level of achievement.

Practically all the science and foreign language course taken by these students were more available to them than they were to the control group against whom the experimental students had been compared, suggesting, then that warning of students of prospective difficulties and special motivation were effective in avoiding pitfalls and overcoming obstacles in these normally less available areas.

Finally, it appears that students in this group have little chance of success in the pre-medical or pre-dentistry courses.

CHAIRMAN WEST: Before we conclude the discussion, I am going to ask Mr. Lamke to contribute something on this same point.

MR. LAMKE: At Washington University students who rank in the lowest third of their high school class are not admitted unless they pass an English comprehension test, an intelligence test, and either a test in mathematics or in foreign language.

All are also required to take before the semester gets very far along, a general psychological test, a reading comprehension test and a reading speed test. These tests are not used for admission but they have a considerable effect upon the question of a student's dismissal from the University for poor scholarship.

Recently, after about 15 years of experience the faculty of the schools of Engineering and Architecture, after a careful study, have decided that it is practically impossible for any student, although he does quantitatively meet the requirements for admission to the school, to do well in the engineering course if he ranks in the lowest third. Consequently, beginning with the Fall of 1938, no student graduating from the lowest third of his high school class will be admitted to the School of Engineering or the School of Architecture.

Section B, Colleges of Liberal Arts, Teachers Colleges, Junior
Colleges, and Normal Schools

MR. C. W. HELMSTADTER, CHAIRMAN

OBJECTIVES VERSUS TECHNICALITIES
IN THE DETERMINATION OF
ADVANCED STANDING

W. P. SHOFSTALL

When an admissions officer evaluates the transcript of a student applying for transfer, he is determining educational policy as surely as those who set requirements for the degree. Most admissions officers would agree that the transcript of the student who transfers from one school to another is evaluated for two purposes: First, to determine the extent of his education; second, to evaluate his potentialities for further education. In spite of the clarity of these purposes, a study of educational literature of the last twenty years does not reveal any direct attempt to determine if current practice is achieving them.

Those who consider curriculum content, methods, or degree requirements are usually theorists who have little time or opportunity to change practice. The admissions officer, unlike the educational theorist, is so busy doing something about educational policy, that he seldom has time to talk about it. By his decisions, he can completely nullify one course or one year's courses which the student has previously taken. His action is generally based on data which are invalid as indicators of the student's knowledge. Our literature is replete with every sort of criticism of higher education except that which is directed toward policies affecting transfer students, who constitute more than half the graduates of American colleges today. We not only seem to have been too busy to inquire seriously into the validity of our practice—in spite of its vital significance to so many students—but we have also displayed blatant ignorance of certain related research and experience which give clues to the answers.

If, therefore, our problem is to evaluate the extent and quality of the transfer student's education, we may utilize some experience and research from other sources.

First, in the transfer of the high school graduate to the college level, we have been seeking to solve the same problem for a number

of years. At first we required specific courses taught according to specified textbooks. Then we became more lenient and allowed slight variations of the pattern. Because of the obvious inadequacy of this policy, we undertook some research, of which the most recent conclusions are summarized by McHale and Speek¹ as follows:

"Recently, however, various studies have shaken the prevailing belief that high grades together with a certain pattern of required studies unfailingly predict a successful college career. These researches show that there is little direct connection between pattern of studies taken in high school and subsequent success in college. . . .

"In some quarters it is predicted that there will be an early abandonment of the practice of requiring for general college entrance a specific minima of credits in traditionally favored secondary school subjects."

Surely the problem of determining a student's educational status at the twelfth grade level is not significantly different from that at the thirteenth or fourteenth grade.

Second, the recent growth and popularity of comprehensive examinations is the best known evidence that colleges are today in serious doubt regarding the validity of course credits as a measure of the student's education. In fact, most colleges which are not using some form of comprehensive, oral or outside examinations, do not believe their present system of credits is valid, but they are continuing the present practice because they know of nothing better.

Third, the tremendous popularity of survey courses and "new plans" such as those of the often cited General College at Minnesota and the College at the University of Chicago are concrete evidence that we do not accept traditional courses as the only ones adapted to general or liberal education.

We have, therefore, evidence and experience, which, even if it does not directly solve our problems, should cause us to challenge some of the rules and regulations regarding advanced standing as set by faculties and admissions boards. We must take precautions that our challenges are based upon sound evidence and seek to prove by experiment the validity of any modifications of present regulations.

When a candidate applies for advanced standing in a college or university, he does not find many of the admissions officials pri-

¹ "Newer Aspects of Collegiate Education," Kathryn McHale and Frances Valiant Speek, American Association of University Women, 1936, pp. 17-18.

marily concerned with his ability to do advanced work. This is definitely shown by the information he must present to them, as well as by a study of the reasons for exclusion or for loss of standing or "credit." The two assumptions upon which most admissions officers seem to be operating are: Course titles, accompanied by statements regarding sequence, time served, and teachers' marks give the best available information regarding a student's ability and educational status; and second, transfer from institutions with curriculums unlike those of the institution to which the student transfers is undesirable.

The present practice, so far as the first assumption is concerned, is best illustrated by the following statements regarding admission for advanced standing selected from typical catalogs of Middle Western universities.

"The student must present an officially certified statement of the college work already accomplished, showing the length of time in attendance, the length of each course in weeks, the number of recitations or lectures per week, the length of recitations or lectures, the amount of time per week in laboratory courses, and the grade and credit hours secured."

(The statement must include) "his college record, subject by subject, with the grade obtained in each subject and the year in which the course was taken."

No one is more familiar with the farce and fallacy of the two major assumptions laid down for admissions officials than is the student who may take his first two years in one college and then transfer to another. The problems which arise are quite unbelievable to a person not intimately acquainted with present conditions. In general, he will find that because certain course titles seem desirable, because certain sequences seem necessary, and because a certain ritual is approved in one college, any student transferring to that college must have gone through the same ritual in the same way even though conditions in the college he previously attended may be absolutely different or irrelevant. The situation is more clearly illustrated by the following analysis of specific policies met by students seeking to transfer from one college to another:

1. Course titles are more important than course content.

The instance of the student who failed to receive advanced standing in the course in "Acting" because the college to which she transferred offered only a course in "Dramatic Interpretation" is a case in point. Likewise, we have

the student in accounting who was able to get credit for this course only after it was established that the course was in the social-science and not the secretarial department. Neither student was questioned about her knowledge. The course title was the only difficulty.

2. The only way to get knowledge is by taking courses.

Effort is seldom expended to find out how much knowledge the transfer student has. But woe unto him if his record of courses is unorthodox. A young Ph.D., who had met rigid requirements for a reading knowledge of two foreign languages, including French, found it impossible to enroll in a library school because he had no "credit" in French.

3. Courses, which represent the only avenue to education, are so specific in their application to every student that if they are pursued in a certain year they are one hundred per cent effective, but if taken in a different year, they are of no value whatever as educational experience.

An example in point is the fact that sociology, economics, and psychology are frequently not accredited if taken in the freshman year. A perplexing situation would have existed for anyone but an "educational bookkeeper" when the student who had taken the first half of her six-hour course in sociology as a Freshman and the second half as a Sophomore presented the course for advanced standing. The only way open to the official was to refuse credit for the second half of the course because the student had no credit for the first half.

4. A course taught in a given college can be of no value to a transfer student if it is not taught in the institution to which he transfers.

The application of this principle is especially noticeable with less commonly offered courses such as "Consumers' Problems." That is, a student may receive advanced-standing credit for such a course if it is offered by the school to which he transfers; otherwise, the student might as well not have taken the course, so far as credit is concerned.

5. There is a clear-cut line of demarcation between the fourteenth (sophomore) and the fifteenth (junior) years.

This was effectively demonstrated to the student who attended two summers in a four-year college before she was graduated from her junior college. When she sought transfer to a third institution with 64 hours credit from the junior college and 16 hours from the senior college, she was informed that although all other technical requirements were satisfactory, she could receive not more than 62 hours advanced standing credit—the maximum allowed from a junior college.

6. The ability of the student to do advanced work is insignificant compared with the fidelity of the student's record to the sacred formulae.

One student, ranking in the upper seven per cent of her class (teacher's marks and comprehensive examinations being used as bases for ranking), sought a transfer as a junior college graduate; another student who ranked as barely average according to teachers' marks, and in the lower sixteen per cent of her class according to comprehensive examinations, sought admission to the same university. The first student had taken 18 hours of work in survey courses (the university accredited six, but no more). She had also taken a sophomore course during her freshman year. The second student was interested only in credit and the college degree. Number one had a definite purpose in life and a profound respect for learning. Number two transferred as a full-fledged junior; number one, as a sophomore.

7. Time served or method of instruction is of prime importance, since the knowledge or ability of the student cannot be determined.

Two students transferred from one college to the same university. One had taken a science course which was taught by using two lectures and one three-hour laboratory period. The other took a science course which used the method of two hours of lecture and three hours of laboratory, except that instead of placing the laboratory in charge of an assistant, as was done in the first student's course, the professor chose to give one hour of lecture at one period and give the other hour of lecture during two two-hour laboratory periods. The first student transferred with full credit; the second with half credit, in spite of the fact that the second was a much better student.

8. Objectives of the first institution need not be sought in evaluating their practices.

If teachers were told that the passing mark in an institution is a "D" grade, they would revolt at the unfairness to them and to their students if they suddenly discovered that the registrar was refusing credit, not only to students who had received the failing mark, but also to those who had received the "D" grade. Yet, two students with equal scholastic averages transferred to the same university, and one failed to receive junior standing because he had six hours of "D" grade work, even though the first institution considered a "D" grade passing.

Illustrations similar to these could be multiplied and enlarged upon by every school official who has been concerned with the problem. The net result seems to be that unsolved difficulties inherent in our credit system are even more serious for the transfer student than for the full residence student. The registrar, at least, knows the content of the course and the reputation of the teacher of the resident student. Course titles are about all he has for the transfer.

The solution to the problems is not clear but the need for action is. Every four-year college or university has a number of students who have transferred. It would be relatively easy for them to select from the records of these transfer students a group which represents students with the educational status and ability they would prefer in all transfers and a second group which in one way or another does not represent the ideal. Then the transcripts for these two groups could be carefully analyzed to determine what was known about them at the time of their admissions which would have predicted their success or lack of success in future study.

For example, at Stephens College within the past few weeks we sent the records of 283 of our most recent graduates to the ten universities to which they transferred and asked the universities to send us a statement of the grades earned by these students and the amount of advanced standing they received on admission.

The results were what one would expect from a study of this kind; 181 students made higher grades in the university² than they did in Stephens College and 102 made lower grades. We then began working with the data to see if we could find any clues which would help us predict success for future graduates.

We next found that in general, students who had high grades in Stephens College made high grades in a university and students with low grades before transfer had low grades after transfer. There were, of course, some exceptions to the general rule, for some students made grades lower than that predicted; others made higher grades. The next step in such a study is to find if the students who failed to do as expected had any unique items in their transcripts. Some questions which could be asked and answered are:

1. Did one group take any courses the other did not?
2. Had one group any more hours of "D" grade than the other?

² Universities included in this study were: Missouri, Oklahoma, Kansas, Nebraska, Iowa, Illinois, Wisconsin, Indiana, Ohio State, and Colorado.

3. Was one group any older or younger than the other?

If universities were to carry on such a study including not only students from one college, but transfer students from all colleges, and if these results could be made available, a significant step toward policy formation would be taken.

In predicting the outcome of such research, we might reach various conclusions. This type of research may give results similar to those obtained by President Lowell³ in his research twenty-six years ago, when he concluded, "As a preparation for the study of law or medicine, it makes comparatively little difference what subject is mainly pursued in college, but it makes a great difference with what intensity the subject is pursued."

Or we may conclude with Mr. Ben D. Wood,⁴ . . . "there really may be significant differences between collegiate subject matter with respect to guidance potentialities."

But we may find as we did in a study of 901 students who transferred to the professional schools and colleges at the University of Missouri,⁵ . . . "courses which were the best predictors of scholastic success in one professional field were not necessarily the best in another; likewise, those which were the poorest predictors in one field were not necessarily the poorest in another."

In these three studies all the students who transferred came from the same college. The results we may expect to find when we study transfers from fifty different colleges to one institution are not difficult to predict. We will probably conclude several years of research by discovering what we already know by inference, namely, (1) the general scholastic average is the best single index of a student's ability to do advanced work, and, (2) course titles and credits are not valid measures of a student's educational status.

There are few if any admissions officers who would object to the statement that the transcript of the transfer student is evaluated for the purpose of determining the extent of his education and his potentialities for further education. In spite of this clarity of purpose, so painfully lacking in most considerations, a study of the educational literature of the last twenty years does not reveal that current practice is achieving the objectives so clearly understood.

³ Lowell, A. Lawrence, "College Studies and Professional Training." *Educational Review*, Vol. LXII, Oct., 1911, pp. 217-23.

⁴ Wood, Ben D., "The College Curriculum and Vocational Guidance." *School and Society*, Vol. XXI, April 25, 1925, pp. 508-12.

⁵ Shofstall, W. P., "Relative Values of Freshman-Sophomore courses as predictors of Scholastic Success in the Professional Schools and Colleges of the University of Missouri." Unpublished Doctor's thesis, 1932, p. 151.

We have, however, made progress, for we can predict with a fair degree of accuracy the ability of a transfer student by admitting him on the basis of high school average, college average, and scholastic aptitude tests.

Our major problem, therefore, is to predict or to measure the educational status of the transfer student. Obviously we cannot continue practices which are considered invalid simply because we do not know anything better to do. As a solution to the problem, I wish to suggest a plan of action which will protect the present high educational standards and at the same time serve as a more adequate technic for determining educational status. Instead of arbitrarily reducing advanced standing credit, we could merely assign conditional credit for those subjects which are unorthodox because of title, year taken, time spent, or grade earned. We could allow these students to enroll in courses simultaneously with students who had the orthodox courses. We can grant or refuse to grant admission on the same bases as are now generally used, but we must not arbitrarily reduce advanced standing credit when there is a doubt about the student's educational status.

In the school which depends entirely upon credit as a basis for determining educational status there are devices which could be used in order to carry out this plan effectively. For example, if the student could be enrolled on the assumption he had taken the orthodox courses in the orthodox manner and his professors could each be requested to report not only a grade in the course for him, but also a statement of their opinion as to his educational status in comparison with other students who had residence credit equal to the advanced standing desired by the transfer, the composite judgment of four or five professors at the end of a semester or double that number by the end of a year, plus the student's grades, would certainly be more accurate than any single judgment of an admissions officer at the time of admission. These devices would not be necessary in those schools which use examinations in one form or another.

With such a general plan in practice, we can carry on our research, develop cumulative records, and in other ways develop techniques which would eventually make conditional credit unnecessary. And what is even more important, the intelligence and educational statesmanship shown would command both self-respect and the respect of others, which is essential for handling a problem so important as that of determining the admission and advanced standing of transfer students.

GUIDANCE IN PREPARATION AND
PLACEMENT OF TEACHERS

HARRY E. ELDER

About twenty-five years ago it was my good fortune to be a member of a college class taught by a wise teacher—the late William Wood Parsons—then President of Indiana State Normal School. President Parsons was not a specialist like those to whom we have sometimes rendered, in more recent years, so much homage only because they knew “more and more about less and less”; but he was one of the greatest generalists among the educators of his generation. He saw and interpreted events and situations in their true relation to other events and situations; he saw wholes as well as parts; he was a master at integration and generalization.

One of the generalizations evolved in this class, taught by Mr. Parsons, was that “civilization is the multiplication of human wants and the devising of means to supply those wants.” As an illustration of this principle we may point out that the wants of primitive man are few and simple; no amount of subtle or attractive advertising will appeal to him. But civilize and educate him and his wants increase. At his meals he must have chinaware and silverware to replace the savage use of tooth and nail found so satisfactory in the days of *Pithecanthropus Erectus*; he wants tailored clothes instead of the skins of animals, a house instead of a cave, and gas heat instead of a bonfire. In other words, demand, either artificially or naturally created, must precede and be the cause for supply. This principle is as applicable in the field of education as it is in the field of industry. With the State of Indiana as an example, let us examine its application to the problem of guidance in the preparation and placement of teachers.

Since 1923, at least, Indiana has been making a sincere attempt to prepare and license teachers to meet the demands of its public schools. The teacher training and licensing law enacted that year discontinued completely the old examination system and made certification wholly dependent upon college preparation. Briefly stated, the law authorized the State Board of Education to issue first-grade licenses for primary, intermediate-grammar, and one-room rural school teachers upon the basis of two years of college work, first-grade licenses to high school teachers of regular and special subjects upon the basis of four years of work, and administra-

tive licenses upon the Master's Degree in Education plus a specified number of years of experience. These provisions all seemed very satisfactory in 1923 before experience with the operation of the new plan began to reveal its shortcomings. In fact, because of the previous existence of "blanket" licenses based upon diplomas from Indiana State Normal School, and licenses covering a wide range of subjects earned through the examination system, there was no sudden jar as the old regime gave way to the new. For several years the young teacher with the more highly specialized training and the license of more narrow application was able to find a place in almost any school system, because the certification of the older teachers was broad enough to allow for adjustment in teaching assignments.

As the passing years reduced, through retirement and death, the number of older teachers and increased the number of younger teachers, administrators began to encounter difficulty in confining teaching assignments within the range of the licenses held by the teachers. The State Board of Education, by implication at least, agreed with the administrators that both elementary and high school licenses were too narrow in their application. A temporary permit system was inaugurated which, when full grown, allowed teachers, by earning a few additional hours of college credit, to extend the range of their licenses. Primary and intermediate-grammar grade licenses were made applicable—without additional college credit—for teaching in one-room rural schools, and rural licenses were soon approved for teaching any elementary grade in any consolidated or city school; primary licenses were issued—with a small amount of additional credit—to holders of intermediate-grammar grade licenses and vice versa, and permits were issued, granting high school teachers the privilege of teaching in fields not covered by their original licenses. By the opening of the present decade the "writing on the wall" began to be legible. License patterns did not conform to actual needs, with the result that a surplus of teachers of certain subjects and grade levels appeared at the same time. The trial and error or "hit or miss" method was beginning to bear fruit and something had to be done about it.

As the problem became apparent, sporadic studies of the licensing of each new crop of college graduates were made by interested individuals in some of our institutions. Others began to analyze the actual teaching assignments of both the elementary and high school teachers of the State, while the State Department of Educa-

tion began to tabulate and to study the significance of the large number of requests for temporary teaching permits. Individual placement bureaus and, more recently, the Indiana Institutional Teacher Placement Association, have found significant differences between the supply and the demand on various levels and in various areas of subject-matter. Combinations of subjects or grades covered by the licenses did not correspond with the combinations to be taught. Shortages in certain areas and leftovers in others told the same state-wide story. On the secondary level there was, in 1936, an actual scarcity of newly licensed teachers in Commerce, Vocational Home Economics, Latin, Women's Physical Education, etc., while a considerable number who qualified in other fields remained unemployed; on the elementary level employing officials have become so insistent upon securing teachers with four years of college preparation that in most city systems teachers with only two years are employed only as a last resort. On March 11, 1937, the State Board of Education recognized this appeal for better elementary teachers by approving a four-year curriculum for the preparation of elementary teachers which will be fully effective after July 1, 1940. At the same meeting the prevailing consensus of opinion favored less specialization in elementary licenses in the near future. As a result of all these studies and board actions the information is rapidly accumulating for the more effective and intelligent guidance of the preparation of prospective teachers.

Other movements are well under way in Indiana which greatly aid in producing teachers who are more fully qualified to meet the needs of the public schools. The two state teachers colleges use admission blanks on which personality data as well as the scholarship record of high school graduates is recorded. In this way high school principals have been enlisted to assist in the selection of students of the highest type for the teaching profession. The legislature has granted authority to each of the teachers colleges to grant annually two scholarships in each of the ninety-two counties of the State. This should tend to raise very materially both the scholarship and the personal qualifications of prospective teachers. The close co-operation between superintendents of schools and the placement bureaus of colleges is very fruitful. Before young teachers are employed, hiring officials are supplied with ratings from the training institutions; after the teacher has worked in a community for a semester or more, the superintendent furnishes ratings to the

college. Through this interchange both groups are receiving information invaluable in the teacher training process. All these influences have resulted in the adoption by the teachers colleges of a selective admission and selective retention process. By recommending to training institutions only such high school graduates as they should be glad to have return to teach in their systems, administrators are rendered a genuine service in guidance in the preparation and placement of teachers. In other words, to the end that the entire public school system may function more effectively, all of the educational forces in Indiana are striving to unite the parts of the problem of teacher preparation and placement into an integrated and synchronized whole.

INDIVIDUAL PROGRAMS

MR. STEWART, Central Y.M.C.A. College: Three groups of people at our college are concerned with individual programs. There is, first, the group of educational counsellors in the Junior College. These men are faculty men, who devote about a fifth of their time to the advising and counselling of students. They are assigned according to the curricula of the college. For instance, there are a pre-medic advisor, three or four Liberal Arts advisors, and a pre-engineering advisor. Their general function is to deal with individual students as they come to the college in terms of fairly well established curricula described in the literature and our catalogs.

Then there is a second group, and one about which I shall say very little, since I see one of our later topics calls for Vocational Guidance. We have a group of counsellors who are called personnel and vocational counsellors. They are under the direction of the Dean of Students, who is also the director of personnel, and their function is more nearly that of the analysis of the students' abilities, through the use of various tests and techniques, largely the American Council on Education, psychological examinations, and the Whipple reading test. This group tends to check with the student in regard to his curriculum choice and his vocational choice. They operate during each semester.

On the Senior College level, the guidance and counselling of students is carried on by the department heads. Each student as a Junior, selects his major field and is assigned thereby to the head of the department. These persons then serve as counsellors and

during the semester, they arrange the following semester's program with the students.

Thus, counselling at our college is carried on separately from registration, except that, of course, which is incidental to the incoming freshman.

Several devices, simple in form, are used in the counselling procedure. A little folder carries a memorandum and a note from the counsellor, and also a duplicate of the proposed program for the coming semester. Then the only need at registration is to fit it into the time schedule.

There are several complication factors in this scheme. First of all, about half of our college enrollment is part time, largely in the evening. Since these students have only a part-time program, it is difficult to arrange interviews, but the devices of the regular counsellor are helping to expedite the student programs in this area.

MR. McWHINNIE, University of Wyoming: Four years ago, we, at the University of Wyoming, were confronted with the following facts:

First, that there were more and more students coming to us who did not wish to follow the particular programs that were embodied in the five colleges. We found that there were more and more students coming who wished to take some work in preparation for admission to a professional or specialized school. We had a demand on the part of students to study one or two years in their own state.

We were also confronted, as we had been for years, with the pride of a small institution in doing for its students certain types of service which we felt the student couldn't secure in large institutions. That had been a matter of pride in the institution for a good many years, this opportunity to give special attention to special students, that is, to meet special needs. Then of course, during recent years, the problem of training students to the immediate changes in economic conditions, and the demand for opportunity along lines in which we weren't offering organized programs confronted us, and led us to set up a Central Curricula Committee, which we asked to study the question of breaking down the lines of distinction between the different colleges and working out combination programs. As a result, that committee published, in mimeograph form, a certain statement of policy. These are the points which are included:

1. Offering work embodying freedom in the election of courses under competent guidance.

2. Elimination of all technical requirement for courses on a proper showing of previous training or experience, except in the case of military training.

3. The use of comprehensive examinations both for satisfaction of prerequisite courses and as a basis for granting final recognition of the completion of a student program.

4. A restatement of the present liberal residence requirements. We felt that our residence requirements were quite liberal and that we would continue on that basis, and

5. Construction of individual programs for any practical objective in conference with the various faculty members involved. These programs included professional and semi-professional needs on the different college levels.

We announced that policy in 1935 and at that time set up some forty different programs that have been outlined in this bulletin. It is now developing, of course, that many of these serve no particular need. We have had over a hundred students out of approximately fifteen or sixteen hundred in these special programs.

MR. STEWARD: I should like to ask if the core of that work remains in Liberal Arts or is it really administration or does it come under some of the other colleges.

MR. McWHINNIE: That special curriculum represents all of the colleges and these forty programs which have been set up are not restricted to Liberal Arts combinations—they represent combinations in all of the colleges. That is, all the five colleges on our campus participate in it. Of course, the College of Liberal Arts has more opportunity to participate, in that the program is more flexible there to start with than in engineering where the program is more definitely defined.

MR. STEWARD: Do these plans lead to a Bachelor of Arts Degree?

MR. McWHINNIE: These programs are only two-year programs, but they lead to the degree.

Open Forum

SUMMARY

JAMES A. GANNETT, CHAIRMAN

QUESTION: How has the problem of excessive program changes been handled by other institutions?

MISS BURGOYNE (University of Cincinnati): As a matter of curiosity, this Fall I checked over the program changes that were made in the College of Liberal Arts and I found that 300 students out of a total enrollment of 1200 in the College had made changes. Of the 300, one-third of them were made by freshmen. I believe in most cases the freshmen changes were legitimate because there is great difficulty in arranging a program for new students when one is not quite certain just where the student should be placed.

That leaves two-thirds of the changes having been made by upper classmen. In some cases, I believe the faculty advisers gave them the wrong information.

MR. MITCHELL (Stanford University): How much time do you allow for these changes?

MISS BURGOYNE: Two weeks.

MR. MITCHELL: Do you apply any penalty after that period has elapsed?

MISS BURGOYNE: For a while we did have a \$1.00 penalty but we found that there were so many exceptions made that, in the end, we were not collecting many dollars.

MR. MITCHELL: We give them two weeks, after which it is \$2.00 per change and no exceptions are made. It doesn't bother you much after the two weeks if you handle it that way.

MISS KUNTER (Depauw University): A few years ago I checked over and found, to my surprise, that over half of our students were changing courses. At that time we had registration at the time when other people usually had pre-registration. We were having registration in the spring for the fall term and registration in the middle of the fall semester for the following semester. I am in sympathy with changes when there is a reason for it; I don't think there should be a penalty if there is a real reason for making the change, if a student changes his mind about certain courses into which he is going, but I decided there must be something wrong with our system, so

I decided to do a little experimenting. Since that time, we have continued with pre-registration, but that is not considered final. We have a final registration the first day of the semester. Pre-registration gets the students started to thinking about what they are going to take and gets the advisers in the mood to consult the students and then, in that interim between pre-registration and registration, they have time to think about all the changes they are going to make. We want them to get those changes thought out before final registration and when they turn in their final registration, we find they have very few changes to make afterwards.

MR. REED (University of Georgia): How long after registration do you set the date beyond which a person cannot take any new subject for credit?

CHAIRMAN GANNETT (University of Maine): How many would allow a student, we will say, a week or less to make program changes without penalty? (Quite a showing of hands) How many would allow two weeks without penalty? (Quite a number) How many would allow three weeks without penalty? (About 5 or 6)

MRS. HAYES (Bowdoin College): If our students do not make the change within a certain period of time, we charge them \$7.50 to change.

QUESTION: *Should the "condition" or "incomplete" be shown on the permanent record or should the grade which removes the condition only be recorded? If the "condition" or "incomplete" is listed on the permanent record, should it then appear on all future transcripts of the record or should the final grade only be sent out from the office?*

MISS PROBST (Goucher College): I would like to make the point first of all of separating the term "condition" from the term "incomplete." I think before we could discuss this clearly, we would have to define what we mean by our grades. I do not think that the term "incomplete" is a grade. What are our grades? It is generally accepted that the symbols most frequently used for grades are letters. A, B, C, and D are the passing grades, I believe, more commonly used; E, condition; and F, failure. If that is the grading system, those are the grade symbols used to express quality of work; then we would eliminate the term "incomplete" from the category of grades. "Incomplete" is a report, a statement of fact in regard to the status of that course at the time that report was made.

Each institution would have to determine how they are going to

handle the "incomplete" reports. On what ground should an incomplete report be made and how long does the student have to complete the work of the course? When should a student be given the privilege to complete the work of the course?

"Condition" is generally accepted as a grade; therefore, "condition" should go down and should be a part of the permanent record. When "condition" is to be removed, under what conditions it is to be removed and what grade is to be given when "condition" is removed? That is another matter also which has to be settled by the policy of the institution. Whether it can be removed with a grade indicating the quality of the work done when the condition was removed, or whether no grade can be given higher than a "D" when "condition" is removed,—those are questions which have to be settled within the institution. I think both practices have been followed.

I should say that "incomplete" may be put on the record or not put on the record, according to the desire of the particular institution. It makes no difference. If the student has the privilege of completing the course when the work is completed, that becomes the final report on the course and that is what is important, but under no circumstances should the "condition" be omitted from the permanent record, because the "condition" was the grade when the course terminated, and therefore it is a final and should be a permanent record.

When the "condition" is removed, that also should be put on the permanent record and should remain there and be a part of the record. At Goucher we are saying that an "incomplete" can be made only if the student is absent from the final examination, or if an extension of time beyond the examination date has been allowed by the instructor, either for a completion of papers or completion of required reading or some other specific piece of the course for which the student is not responsible for the work not having been done. But we are very, very careful in giving out our "incomplete" grades and an instructor or student must report in advance of the close of the course that a certain part of the course is not going to be completed. The report must be in writing and filed in the Dean's office.

We have a definite procedure in regard to our "conditions." We have the instructor fill out a form showing what the "condition" covers and when and how it is to be removed. That is copied, one copy being sent to the student and one copy to the instructor. The

"condition" becomes effective only when the instructor and the student both hold these two copies showing what is to happen to the "condition."

QUESTION: *What is the symbol generally used to indicate that the work on a continuous course does not deserve a passing grade at the end of the first semester but that, with continued improvement, full credit may be allowed on the course when it is completed at the end of the school year?*

MISS PROBST: It seems to me that that is a question which deals with internal policies or policies relating directly to the particular institution. It is possible, I suppose, to have a course in which the first semester's work is not graded until the second semester is completed. I think elementary language courses are frequently handled in that way. I don't see that any symbol is needed. It is just understood that certain courses are not graded until the second semester is completed. If the second semester is not completed or failed or "conditioned," the first semester isn't graded. If it is "conditioned," I should say the first semester probably would be graded when the "condition" on the second semester was removed, but the notation here is, "... but could be passed with continued improvement." If the course hasn't been of sufficient quality to be passed, then I should think that some grade indicating "not passing quality" should be used.

REV. MOLONY (St. Edwards University): I would like to call an "incomplete" mark a grade, because it would represent to our office the fact that this man did not have his work in at the required time. In case of sickness, we would make a notation to the effect that the man was sick and was given extra time.

MR. REED: In making up averages for delinquent lists, and so forth, if you have an "incomplete," what mark do you give it? In our institution, we count it as a passing grade not quite completed.

CHAIRMAN GANNETT: We ask the instructors, when they report an "incomplete," to give the extent of the deficiency—that is, it may be two experiments, or one lab. report—and the probable grade which the student may receive when the work is made up, that is, in the judgment of the instructor, the probable grade which he will obtain.

MR. REED: I think we haven't discussed the most important thing and that is the matter of the transcripts, what goes on the

transcripts. Is that "E" to be taken off the transcript when it is made up? That is the question.

CHAIRMAN GANNETT: Let us have a show of hands covering your practice in the use of a "deficient" or an "incomplete" or a "conditional" grade which has later been passed by a second examination or by whatever means you have provided. Are those grades kept on your record or are they erased when the work is made up? Those who keep them in the record permanently, please indicate.

MR. KERR (University of Arkansas): I think you would have to split that question. Our practice varies with the two types of grade. A "conditioned" grade is kept on but an "incomplete" is removed.

CHAIRMAN GANNETT: Let us take first the "deficient" or "incomplete" grade. Is that kept on your record permanently?

MEMBER: I am going to have to ask you to split that again because it is the practice of a number of institutions, I know, to change that "incomplete" to an "F" if it is not made up within a certain period of time.

CHAIRMAN GANNETT: In general, how many keep the "deficiency" on the record permanently? (Quite a few) The "incomplete?"

How many would keep a conditional grade on the record permanently after the course had been made up through a second examination or whatever means you have? (Most would) How many would not? How many would erase the condition? (Quite a number)

MISS PROBST: Mr. Gannett, I really think that is an awfully serious matter. If we are getting transcripts from students who have been graded "conditioned" and the transcript doesn't show that, I really think that we ought to try to work up a sentiment for changing that practice. I think it is a very serious matter, because that "E" is a grade and it represents the quality of work when the course terminated, and therefore I should think that we are under obligation, moral obligation, to permanently record that "E" and to keep it there. I would very much dislike to have any transcript sent to us for a student who had an "E" and that "E" not showing on the transcript.

CHAIRMAN GANNETT: You would regard it as an incomplete transcript?

MISS PROBST: Yes; that is not an honest transcript. I would regard it as a dishonest transcript.

MR. SCHMIDT (University of Akron): In the case of a "conditioned" grade, at our institution it is given only at the mid-semester

of the year's course. That is the only kind of a course in which students can be given a conditioned grade, and it can be removed only by the students doing work which is satisfactory to the instructor during the second semester. Sometimes the instructor may impose a requirement that the student make at least a "C" grade in the second semester, and then, when he does that, he gets a "D" grade, or just the lowest passing grade, on the first semester's work. That is on that two-course proposition. We change that recording to a "D." That has been our policy.

MR. MITCHELL: Mr. Chairman, I think Miss Probst hit on a very good point there. I think the transcript should be a true, accurate historical record of what happens. To make any change or erasure on the transcript beyond correcting errors is fundamentally wrong and if a person has a "condition," that "condition" should show. Also show that it is made up. The student gets the benefit of the fact that he made it up. If it is "incomplete," show it as "incomplete," but a transcript of a record should be a true historical account of what happened.

MISS OLESEN (University of Idaho): At the University of Idaho, we don't have the "condition" any more. At the time we had it, it was stated as a "condition," but if the student passed it on a second examination, he received a credit, although he would have minimum grade points.

As far as "incompletes" are concerned, all of you who receive our transcripts will sometimes find a date between the grade and the credit column. That is the date of removal of the "incomplete." The "incomplete" is always put on in pencil and doesn't show on the transcript. The date is an indication that the first grade was a temporary grade.

QUESTION: *Are mechanical tabulating machines adapted to the work of the Registrar?*

MR. GRANT (Columbia University): We are having our first experiences with tabulating machines. About last August we installed the equipment, consisting of two alphabetical printing punches, one reproducer, one sorter and one tabulator, the tabulator to be used by the bursar and the registrar jointly. We have been going through a period of study. We have been exploring the possibilities and are finding more and more about the uses of the machines. The more uses to which we can put them, the more valuable

they become, and we are hoping that eventually, with another few months' experience with them, we are going to be able to get the maximum use out of them. If we do, then we feel that they will really pay, not only in the actual saving of money, but in getting the work out promptly and accurately and neatly. It seems to me that for mass production, they are coming into the picture for college work.

One point that I would like to bring out is this, that if several offices participate in the use of the machine, the more people you get to participate at the University, the various officers, the superintendents and the principals and the bursar and the registrar, the more advantageous the use of the machine becomes, and our idea is that the machines have to be put to their maximum use in order to derive the full benefit.

This last year we employed the machine in the production of the pass cards, the class rolls, the student fee sheets, fee lists, the annual statistics, and we are planning in the summer session to have the whole work of the summer session from beginning to end done on the machine.

Another point I would like to bring out is that the machines are not throwing people out of work; they are not replacing any of the regular members of the staff, but rather they are replacing the extra help. I imagine most offices have a budget, an allotment within the budget for extra help to meet periods of peak work, and that is where we hope to show a saving by the use of the machines.

MISS M. WILLIAMS (University of Michigan): We have used the punch card system for gathering our students' statistics for a number of years, and we find that it has been very successful as far as we have gone. We are just this year planning on branching out a little, and I would like to issue this warning to anyone who starts using the punch card system. Don't be afraid to use a number of cards. We have used one card only. From that we have taken all of our statistics that we use for our annual report and we have also used it for our grade study. From that, we have printed our lists of grades. We don't do anything at all with the punch cards for sending out class lists to the instructors. We are hoping that at some time we may be able to do that, but so far it hasn't been possible there.

MR. MARUTH (State University of Iowa): I suspect that the three largest users among state universities of punch card systems

are New York University, the University of Texas, and the University of Iowa. I don't know actually how much the registrars in these institutions have to do with the punch cards as such. I suspect that they detail the work to assistants, such as at Iowa. The use of the punch system though, I think, depends upon the size of your institution and the number of uses you are going to have for the cards. I don't think that a small institution can use punch cards to advantage compared to some other methods. In a large institution in which the enrollment is 5,000 or more, they are the solution to a lot of difficulties.

MR. GRANT: There is someone here who knows more about those machines than all of us put together, Mr. Arden of the International Business Machines Corporation. I wonder if he won't say something about it?

MR. ARDEN: There has been a great deal of question as to about where the line can be drawn so that we can determine who can use the machine profitably and who cannot, and the universities are not the first people who have tried to solve that problem. Industry has tried it in a great many fields, and I don't think there is any more definite solution to that than there is to many of the abstract problems that you registrars can spend a great deal of time discussing and finally come out and decide that it is almost a personal issue. But I will say this, that, naturally, if you assume a fixed rental for any piece of equipment, the greater the use that is made of the equipment, naturally, the lower is the cost per item, and most of the statements that are made by people assume a fixed rental.

There are about 140 branch offices in the United States, and to these offices can be sent cards to be tabulated, sorted and even punched, in any quantity that you wish to send.

I have seen people come in there with 300 or 400 cards to be tabulated several hundred times and they have found it profitable to use the Service Bureau.

I am not convinced that 5,000 is the bottom limit at all. I have good reason to believe from experiences that I have had in surveying various institutions that there are practical applications of machines in at least many schools down to the point of 2,000 and 1,500, but, like every margin, there is no sharp line of division. One institution I have in mind has 5,000 students, and I don't believe I could find an application in there that wouldn't cost them a good deal of money over what they are now paying, and the reason is

that they are not getting any information. They are too poor to have the information, and I don't know just what the situation is that is going to correct that.

On the other hand, I know of an institution of some 1,200 students which is very aggressive, its president demanding a great deal of information from the authorities, both from the bursar's office and the registrar's office, and to that institution I am sure we can find uses on the machines that will serve their needs and do so economically.

MR. GLADFELTER (Temple University): On what basis do they make a charge for tabulating at their branch stations?

MR. ARDEN: That charge would be based on the different machines that may be used in the operation. Some operations would use only a sorter or a reproducer or a tabulator. There are many different sizes of tabulators available and the cost will vary per hour or per thousand cards, depending on the machines that are used, and any flat rate would be impossible because, as I said before, the combination of operations that is involved couldn't be predicted without a study of an individual problem. I am sorry I can't give you a more detailed answer than that.

CHAIRMAN GANNETT: How many registrars keep a cumulative personnel record in their own office? (About 12)

Now, on the other question, in how many institutions is that record kept in some other office, such as the office of the director of personnel? (About 20)

MR. WEST (University of Minnesota): Mr. Chairman, excuse me for delaying this, but I scent something in that question which hasn't been answered at all by attempting to answer the question as it was written, and I think it is the fact that you say it comes from the new registrar, and he is wondering whether he is doing the job that he should be doing or whether somebody else is butting in on the things that he really ought to be doing and, if he doesn't look out, he is going to diminish the importance of his job.

I think every man who goes in on a new job of that kind should first get his job defined, define it as well as he can himself. Nobody here can answer your question for you. You have to go to your president or your governing board after you have outlined your program, shown your relationship. Take it to your president or to whomever you are responsible and find out if that is the way you are to operate, and then do the best kind of job you can on the things that are

assigned to you and don't worry about whether somebody else has something that you think might belong in your office or you have something that you wish you didn't have.

MISS MACHER (Kansas State College): I believe the registrar is in a most strategic position as counselor, not a labeled counselor, but the opportunities that come in the way of a registrar for inspiring and helping students who are rather disturbed is a very precious thing to a registrar who is interested in the personal problems of the students. Personally having the opportunity of calling in students who are low in their grades and trying as best I can, by getting out the big books and going over the records item by item and talking the thing over kindly and as graciously as possible, to try to inspire the student, to raise his morale,—I really feel that I have gotten a great deal of response from students, and would be very unwilling to think that a registrar was out of place when he did that thing.

MR. JONES (Oklahoma City University): Mr. Chairman, I should like to ask how many registrars have some definite relationship to the whole personnel program of the institution.

CHAIRMAN GANNETT: How many registrars have a definite relation to the personnel program in their institution? (Most of them) It is pretty general, apparently.

QUESTION: *Which is more desirable, a personnel director or a committee on student personnel?*

MR. W. P. CLEMENT: (Texas Technological College): There are people in the registrar's work who are tremendously busy with so many things about an institution and then there are some of us, who are in the small minority, to be sure, who are painfully aware of the fact that we don't have much to do, but, lest some of our younger registrars become disturbed over the small task that may be theirs, these things I think can't be brought about overnight or by some edict of a board or a president, but these things come with experience.

It seems to me that, more especially in a smaller institution, the registrar's work is inseparably connected with personnel work and with counseling. I don't see how we can get around it and get around our responsibilities along that line.

In the larger institutions, the registrar's work is very carefully and very closely connected with the personnel program, though the

registrar may have to divest himself of certain responsibilities along that line.

CHAIRMAN GANNETT: Upon which administrative officer should fall the responsibility for absence from classes and rules governing them? In our institution last year we tried asking the faculty members to keep account of absences, but have returned to the old system of keeping all such records in the registrar's office. The teachers turn in absences each week, the registrar records them, and the Dean of Students gives excuses. Excuses for overcuts are so easily secured that we in the registrar's office who bear the burden of the work feel it is for no real purpose. I should like to hear how this matter is handled in other schools which allow only a limited number of cuts. What is the penalty for cuts taken immediately preceding and following vacations?

MR. MITCHELL: In the first place, I wonder how generally records are kept of absences. How many here keep an attendance record in their office as part of their job? (About one-third) How many institutions keep no attendance record whatsoever officially in any central office? (About one-fifth) I suppose the rest fall in between those limits.

In my own institution we keep no official record; this is entirely in the hands of the instructor, and it is of no particular concern to us if a man cuts. After all, if a man is smart enough to cut and keep up with his work, should he be penalized for it?

The only possible way to record cuts is to have the instructor report to a central office once or twice a week. How many here undertake to record excessive cuts on the transcript? (Only a few, perhaps ten) How many actually deduct credit for excessive absence? (About ten or twelve)

Let me ask one more question before you start your discussion. How many registrars are responsible for giving excuses for absences? (Very few) I think that is usually the function of the Dean or some other officer. I am trying to bring out these various points and I hope that you will take that up in the discussion.

CHAIRMAN GANNETT: I think in a great many instances the question of absences may be a matter for faculty or administrative action and not in the hands of the registrar. I think most of us would like to do what Dr. Mitchell does and not have any systems to bother with, but if the faculty demands a system, it is up to the registrar's office, probably, to administer it, and if the registrar

feels that the person who issues excuses is altogether too lenient, it seems to me that it would be proper for the registrar to discuss the matter frankly with the chancellor or the president of the institution and point out the defects and see if a better system could not be installed.

A number of the questions which have come in are of the question box variety and I am going to put these to a Yes and No vote. This first question:

QUESTION: *Is it customary to forward received transcripts to other colleges or universities at the request of advanced standing students when they decide not to enter your institution?*

How many send them on to another institution upon request?

MR. REED: May I ask a question before you put that? I suggest you split that question.

CHAIRMAN GANNETT: How many are willing to send it on to another institution at the request of a student? It is pretty general.

QUESTION: *How many institutions accept credits from hospital training schools? (Quite a few)*

MR. GROSSMAN (University of Illinois): There are two hospital training schools that I know of that are definitely connected with well-established institutions and perhaps there is a different policy followed toward those hospital training schools than there would be toward the average hospital training school in the case of a hospital that has no connection with a recognized higher institution.

CHAIRMAN GANNETT: The next question involves the freshman orientation period. I don't know whether this question involves the length of time devoted to the freshman orientation period or to the program but, on the assumption that it involves the length of the freshman week program or the freshman orientation period, how many use not more than one day for freshman orientation? (A few) How many use not more than two days? (A few) How many use not more than three days? (Quite a number) How many use not more than four days? (A smaller number) Not more than five days? (One or 2) Not more than 6 days? (One or 2) A week or more? (None) The majority seemed to be for the two, three, or four-day orientation period.

DR. FEDER (University of Iowa): For those who may be interested in a survey of that situation, there is a very excellent volume by

J. C. Knode, one of Columbia Teachers College's contributions to education on the subject of orienting college freshmen. It is a very complete summary.

QUESTION: Is it the general practice to send transcripts to any institution or organization making a request, or is the permission of the student required?

How many require the permission of the student before sending his transcript to a college or a firm asking for it? (Quite a few)

SECRETARY ROBINSON: Mr. Chairman, it seems to me that the supposition is that it is to be sent for the benefit of the student and oftentimes you feel that it is going to benefit that student and you can't wait. For instance, if it is about a job, the student may not know that he is being considered for that job. Maybe the prospective employer doesn't want him to know that he is being considered for the job. Naturally, you would send a transcript. We have at Peabody Teachers' College quite a large number of requests of that sort. The supposition is that it is going to benefit the student. If we know that it is not going to benefit the student or suspect it, of course, we don't send the transcript. Occasionally, we get a request from some man who is running for superintendent and his rival wants his transcript. Of course, under those circumstances we wouldn't send it to him.

MR. CLARK (University of Southern California): I have had certain students come back to me when I sent a transcript without permission and, in very emphatic terms, say that their record was their personal property.

MR. WEST (University of Minnesota): I don't think you need to worry about the legal responsibility in the case of the student. If an employer sends to you for information, how did he obtain your name? The man who is applying for the job referred him to you and, consequently, in a sense he has given you as a reference.

MR. ROBINSON: About three years ago I got a letter something like this from the State Department of Education in Mississippi. It said, "It is very important that we have complete transcripts of all the teachers in Mississippi who have attended Peabody College. We are enclosing a list. Please enclose them." And there were 32 typewritten pages, single spaced. We protested but they said, "It is up to you. If you want your alumni discriminated against, why just don't send them." Well, we couldn't get in touch with every

one of those 900 teachers and ask them for their consent. We sent the information without charge and assumed that it would be for the benefit of those students and for the benefit of the public, too.

MR. GRANT: I want to say that any college or university or state or municipal educational board has a right to a transcript if they want it, but when the request comes from an employer, a prospective employer or any other individual, then I think the line ought to be drawn, and the transcript should be sent only with the consent of the student. That consideration is due him.

We have even refused government departments a transcript unless it was requested by the student, and that policy is based on the advice of our attorneys in the State of New York.

MR. WEST: I would like to ask a question on this point. Suppose you are involved in a case, let us say, with the United States Veterans' Bureau or some other organization that wants to see the record of a former student of your institution. Do you consider that they are entitled to that information?

MR. GRANT: No.

MR. WEST: Exactly. In other words, they have to subpoena your records in order to get it.

MR. GRANT: The only department that is entitled to all the information we have is the Department of Justice. We have made an exception in their case.

MR. WEST: Oh, yes, we show them to the Department of Justice. But that is merely a courtesy. You can refuse to do it if you want to.

CHAIRMAN GANNETT: It is now exactly 9:30, the hour at which this session is scheduled to close, and I will declare it closed.

Business Session

PRESIDENT SAGE: At this time I should like to read a message from a former President of the Association, Mr. Walter A. Payne:

Have recently been a roaming Registrar, always with pleasant memories of A.A.C.R. The alphabetical designation looks ominous. Doubtless adequate to conduct a successful sitdown strike. Hearty congratulations and best wishes for a successful meeting.

(Signed) Walter A. Payne

I have two other telegrams which I shall read at this time, addressed to the American Association of Collegiate Registrars:

Greetings, best wishes, fine meeting. Happy memories of past gatherings, least you forget. (Signed) F. Isabel Walcott, an Honorary Member.

This is from a former Vice-President:

I am thinking of you and wishing most successful meeting. (Signed) Grady S. Patterson, Wake Forest College.

I am sure we are very happy to receive greetings from these absent members and are very sorry that they could not be with us.

We shall now have reports from the regular and special committees.

REPORT OF THE COMMITTEE ON SPECIAL PROJECTS

At the meeting held in Detroit last year it was suggested by the Association that the Committee on Special Projects might give consideration to the question of student recruiting. A proposed code of ethics relating to practices and procedures in the recruiting of secondary school students by institutions of higher education was submitted to the North Central Association at the annual meeting on April 11, 1937, by a special committee of that association. The progress report was received at that meeting for continued study with a view to final adoption in 1938. It is recommended that this association co-operate in this study during 1937-1938 in accordance with a plan to be worked out by the North Central and A.A.C.R. Committees.

Higher Education in Other Countries: Your Committee wishes to report with thanks and much appreciation the excellent work of the Office of Education in the United States Department of the Interior, and particularly to Mr. J. F. Abel, Chief, Division of Comparative Education, for the bulletins already issued on educa-

tion in Denmark, Norway, Sweden, and Poland and the one to appear soon on higher education in Germany. We recommend that a special letter from the President of the Association be sent to Mr. Abel again extending to him our deep appreciation for his faithfulness and that of his colleagues in issuing these bulletins from time to time.

Teachers Certificates: At the suggestion of your Committee a study was made during the year 1936-1937 indicating the practices in the 48 states relative to the issuance of teachers certificates. A report on this study was made at the General Session on Wednesday morning. This study has served to bring to the attention of all state certification officers the wisdom of a general uniform policy of procedure in issuing teachers certificates in all of the states, and the advantages of co-operation between state departments and colleges and universities.

Editor of Bulletin Ex Officio Member of Committee on Special Projects: It is recommended that the Editor of the Bulletin be made an Ex Officio member of the Committee on Special Projects.

National Committee on Research in Secondary Education: It is recommended that the Association continue to co-operate with the National Committee on Research in Secondary Education provided that a conference with the chairman of that Committee suggests that the A.A.C.R. can make a definite contribution to the research work and also provided that the A.A.C.R. is not asked to make a monetary contribution, which would be impossible under our present budget allowance.

International Test Scoring Machine: Through the invitation issued by your Committee the International Business Machines Corporation, of New York City, has made it possible for Mr. E. C. Schroedel to appear on our program and explain the uses of the new Test Scoring Machine. We are thankful to the company for this service.

Proposed Study on Scholarship Regulations and Administration: Your Committee recommends that the Association approve a study during the coming year relative to institutional practices and procedures in respect to scholarship discipline regulations and administration. Approval of this recommendation would imply a willingness on the part of each member of the Association to make a report to the committee on how scholarship discipline is handled in each member institution.

Report on Enrollment Statistics and Degrees Granted: This report was issued in January of this year. It was mailed to all members of the Association and represents the work of Mr. Fred L. Kerr, the member of the Committee to whom is assigned this particular task.

Report on Projects for 1936: This report was published in the April issue of the Bulletin. Each year the editor requests from members of the Association a list of the projects completed or in progress. This information is extremely helpful because it provides for registrars probable sources for information on projects in which they are interested. The Committee urges all members of the Association to submit regularly the title and nature of projects which are being undertaken.

Report on List of Institutions: MR. MITCHELL: There isn't very much to report on that. It seems to be used. There is one point I do want to emphasize and that is the occasional misunderstanding on the part of some institutions that think it is the report of an accrediting agency. This Association has taken great pains to make clear that they are not an accrediting agency. The report is an exchange of information, semi-confidential in the sense that we do not print it in our Bulletin, an exchange of information among ourselves as to our practice in handling transcripts and credits from institutions within our own state. We propose this next year to change the title from "Report by Crediting" to "Report of Credit Given," to try to still further make it clear that it is not the report of an accrediting agency, and I will appreciate it very much if you will spread that impression wherever you have a chance. It is one thing that has gotten us into difficulty once in a while and it can easily be avoided if we will all have a clear understanding of what the report is.

Budget: The budget allowance for 1936-1937 amounted to \$500.00, of which \$412.94 was expended to April 7, 1937, leaving an unused balance of \$87.06.

Respectfully submitted,

R. M. WEST
FRED L. KERR
J. P. MITCHELL
K. P. R. NEVILLE
IRA M. SMITH, *Chairman*

PRESIDENT SAGE: Next, we shall have the report of the Budget Committee, by Mr. Bright.

MR. BRIGHT: Mr. Chairman, ladies and gentlemen:

Your Budget Committee, as you know, is made up of three members as provided for in the Constitution, the Presidents for the past two years and the President-elect. The Committee has gone over our resources. We have an estimated income of a little over \$4,000 for the coming year and we propose for adoption the following budget, which has not departed widely from the budget of the past year.

ESTIMATE OF RECEIPTS, 1937-38

	1936-37		1937-38
	<i>Estimated</i>	<i>Actual Net</i>	<i>Estimated</i>
Interest.....	\$ 93.46	\$ 86.73	\$ 96.24
Dues.....	3,400.00	3,390.00	3,500.00
Subscriptions to Bulletin.....	85.00	248.13	150.00
Sale of Bulletins.....	50.00	64.80	60.00
Advertising in Bulletin.....	200.00	129.00	200.00
Total.....	\$3,828.46	\$3,918.66	\$4,006.24

PROPOSED BUDGET, 1937-38

	1936-37		1937-38
	<i>Appropriations</i>	<i>Disbursements</i>	<i>Proposed Budget</i>
President's office.....	\$ 100.00	\$ 21.88	\$ 100.00
Second Vice-President's office....	25.00	12.00	25.00
Secretary's office.....	50.00	34.24	50.00
Treasurer's office.....	150.00	175.79	175.00
Editor's office.....	2,500.00	2,913.47	2,700.00
Committee on Special Projects...	500.00	412.94	500.00
Convention.....	500.00	166.84	450.00
Monograph.....	500.00	—	—
Total.....	\$4,325.00	\$3,737.16	\$4,000.00

Committee:

FRED KERR

J. R. SAGE

ALAN BRIGHT, *Chairman*

We propose this budget for adoption, Mr. Chairman.

The report was adopted.

PRESIDENT SAGE: Mr. Armsby, the Chairman of the Committee on Local Arrangements and Registration.

REPORT OF COMMITTEE ON LOCAL ARRANGEMENTS AND REGISTRATION

The two issues of the Convention News constitute the main portion of the report of your Committee, to which this brief summary is appended:

Total attendance.....	285
(The second largest enrollment in our history)	
Number of Institutional Fees paid.....	191
Number attending the annual dinner.....	229
Number who went on auto tour.....	186
Number attending ladies luncheon.....	86

Your Committee wishes to make public acknowledgment of their deep gratitude to the management and staff of the Hotel Kansas Citian and to the Kansas City Chamber of Commerce for their splendid and untiring efforts on behalf of the Association. Whatever success has attended the efforts of your Committee is due in large measure to their help.

And, finally, your Committee desires to express their gratitude for the co-operation, the patience, tolerance and appreciation accorded them by the members of the Association. It has been a distinct pleasure to serve such an appreciative group.

A. J. MOON
RUTH BUNDY
EDNA TEETER
J. J. GIBBONS
C. E. EVANS
H. H. ARMSBY, *Chairman*

REPORT OF THE EDITOR

A year ago, when you honored me by the appointment to this office, I was somewhat conscious of the responsibility which that appointment implied. Since then I have felt, in the preparation of each number of the *Bulletin*, a deepening conviction of the importance of our publication to the Association and the value of its content to higher education in general.

During the past year the staff has endeavored to do two things, firstly, to publish in the *Bulletin* articles presenting research and discussions of problems and movements in American education which are of significance to officers of administration in higher education, in general, and to collegiate registrars and officers of

admission in particular; and secondly, to increase the circulation of the publication.

Through the splendid co-operation of the editorial staff and because of the recognition accorded the *Bulletin* by those who are productive of research, and by the officers of regional associations, the editor has been able to maintain the standards set by his predecessor for manuscripts.

Through the splendid work of Miss Preinkert, the advertising manager, a ten per cent increase in circulation has been attained during the past year. A circular letter describing the October issue to eight hundred prospective subscribers and a sample copy of the January number to each of eleven hundred registrars who are not members of the National Association brought in a total of seventy-seven new subscriptions. Of these, twenty-seven were from librarians and twenty-one from registrars.

The editor has also been making a definite effort to have all issues of the *Bulletin* listed in the Education Index. At present only the proceedings number is included. In order to be included in the Index it will be necessary to attain a more complete subscription coverage among librarians. The members of the Association can assist in this undertaking by encouraging the librarians of the institutions concerned to request the listing.

The club plan, which was adopted last year and by which member institutions can receive second and third subscriptions for two and one dollars respectively, has also met with a favorable response.

The readers of the *Bulletin* will be pleased to know that the October number will contain a complete index of the issues published to date.

I am pleased to announce that by vote of the staff, the article in the April issue by Dale D. Patterson has been named as the outstanding contribution of the year. To Mr. Patterson goes the Association's Annual Twenty-Five Dollar prize.

For several years it has been the opinion of the Editorial Board that the name *Bulletin* did not properly suggest the nature and contents of our publication. Upon the recommendation of the Editorial Board, the Executive Committee has approved the change of the name from *Bulletin* of the American Association of Collegiate Registrars to *Journal* of the American Association of Collegiate Registrars. This change will become effective with the October number.

With the continued interest in and enthusiasm for the *Bulletin* by the staff, the members of the Association, and the officers and members of regional and state associations, our publication is and will continue to make a distinct impression upon the readers of journals on higher education.

M. E. GLADFELTER, *Editor*

CHAIRMAN SAGE: The Committee on Office Forms and Filing Equipment, Mr. Holter:

MR. HOLTER: Mr. President, I merely want to say the Committee was crowded for time and we did the best we could in the few weeks we had available to collect the books on office forms. I have observed that a great many registrars were examining the books during the last few days. It may be possible that some of you didn't get an opportunity to do so. If you will write to Mr. Fitch of Denison University, he will be glad to put your name on the reserve list and send the entire collection to you sometime during the year. This is gratis. I believe the box comes to you and you pay transportation charges one way to the next institution. If you care for these forms, make this request directly to him, either at this time, or write him at Granville, Ohio.

It might be interesting to you to know that last year these were sent to 15 different institutions and to two regional meetings.

CHAIRMAN SAGE: There seems to be a real interest in this display of office forms. We are indebted to this Committee for revising the exhibit this year. It has been interesting to see how many of you have found occasion to consult these books. Apparently, they are of much service to the Association.

We will next have the report of the Committee on Nominations.

REPORT OF THE COMMITTEE ON NOMINATIONS

(Reported on Wednesday Morning)

MR. DYRNESS: Your Committee wishes to present the following recommendations:

For President—Fred L. Kerr, University of Arkansas.

For First Vice-President—Edith Cockins, Ohio State University.

For Second Vice-President—Arthur H. Larson, Eastman School of Music.

For Treasurer—H. H. Armsby, Missouri School of Mines.

PRESIDENT SAGE: You have heard the report of the Committee. What is your pleasure?

MR. WEST: Mr. President, I should like to move to amend that report by adding the name of Ezra L. Gillis as President Emeritus.

MR. I. M. SMITH: I second the motion.

PRESIDENT SAGE: You have heard the proposed amendment. It has been moved and seconded that the name of Mr. Ezra L. Gillis be added to the report as President Emeritus. Is there discussion? Are you ready to vote on the amendment? Those in favor, say "Aye." Contrary, the same. It is carried unanimously.

What is your pleasure now with reference to the report?

MR. WILLIAMS: I move the report be adopted.

MR. I. M. SMITH: I second the motion.

CHAIRMAN SAGE: Are there any nominations from the floor? If not, as many as would vote in favor of the report as submitted, please say "Aye." Contrary, the same. (The report is approved.)

REPORT OF COMMITTEE ON RESOLUTIONS

Your Committee on Resolutions wishes to recommend the following report:

1. WHEREAS, The Committee on Local Arrangements, under the chairmanship of Mr. H. H. Armsby, has given so generously of its time and thought to the many matters involved in planning for the Convention, with the result that this meeting in Kansas City has been enjoyable and profitable professionally and the details worked out so smoothly, therefore be it

Resolved, That the American Association of Collegiate Registrars extend to the Committee on Local Arrangements and Registration a vote of thanks and appreciation for its efficient and capable service.

2. WHEREAS, The Missouri School of Mines and Metallurgy, the University of Kansas, Ottawa University, Rockhurst College, the University of Kansas City and William Jewell College have generously aided in the success of this meeting through the services of some members of their staffs and

WHEREAS, The orchestra of Ottawa University with Professor Everett Fetter as its conductor made a special trip to Kansas City to present an enjoyable music program at the annual dinner, and

WHEREAS, The Association is also indebted to Pat Dunn, Molly North and Howard Everett, students from the University of Kansas City, for their musical numbers at the banquet, and

WHEREAS, The Right Reverend Robert Nelson Spencer con-

tributed so materially to the banquet session with his scholarly and inspirational address, and

WHEREAS, The Hotel Kansas Citian through Mr. V. L. Steele and other members of the staff and management has spared no efforts to contribute to our comfort and enjoyment, and

WHEREAS, The Kansas City Chamber of Commerce through its representative, Mr. Eileen Sullivan, and other officials and members, has shown so much hospitality, courtesy and cordiality, and

WHEREAS, The Board of Managers of the Kansas City Athletic Club generously extended the numerous facilities of the club to the members of this Association, and

WHEREAS, The management of the new Municipal Auditorium thoughtfully made it possible for us to inspect this magnificent building under the direction of such courteous guides, and

WHEREAS, The trustees of the William Rockhill Nelson Gallery of Art made possible a visit to that institution, and

WHEREAS, Many others have given of their time to promote this meeting and to its success, therefore, be it

Resolved, That the American Association of Collegiate Registrars thank these institutions, individuals and organizations and request the Secretary to send them appropriate letters conveying this expression of appreciation.

3. WHEREAS, The Association has learned of the death in February 1937 of Mrs. Helen Stanley, recorded at the University of Kentucky, a faithful worker in this organization and in the Kentucky Institutes for Registrars, it records in this manner its evidence of deep regret and sorrow over the passing of one of its members.

A. H. LARSON, *Chairman*

FLORENCE I. MCGAHEY

G. E. WADSACK

REPORT OF COMMITTEE TO CONSIDER THE ADVISABILITY OF
A CHANGE IN THE PLAN FOR ROTATING THE
LOCATION OF THE ANNUAL CONVENTION

(See previous reports of 1920 and 1927)

On January 29, 1937, President Sage appointed a special committee consisting of the members of the Executive Committee, with Alan Bright as Chairman. He authorized the Chairman to make any additions to the committee necessary. The Chairman appointed Miss Carrie Mae Probst and Mr. J. G. Quick as members

of this committee for the reason that they had had a part in previous studies of this kind.

The Chairman engaged one or two young engineers, who were N.Y.A. workers, to chart the membership of the Association, showing the locations of our membership as published in the April 1936 issue of the *Bulletin*. The average airline distances from the home city to certain Mississippi Valley cities were calculated as follows:

<i>Average Airline</i>	
<i>City</i>	<i>in Miles</i>
Cincinnati	596.08
Columbus	604.08
Cleveland	624.45
Detroit	621.29
Chicago	604.63
St. Louis	629.61
Pittsburgh	648.43

These cities were selected as points where there may be adequate hotel facilities to accommodate our membership. From these average airline distances a further calculation was made and it was found that the point where the average airline distance becomes a minimum for the entire membership is a point about eleven miles south of Lima, Ohio. This calculation was made in order to determine the central point.

The committee considered the following alternatives:

1. Should we recommend that all previous understandings be abandoned and that the matter of the Convention city be left entirely to the Executive Committee?
2. Would it be preferable to ask the entire membership to vote on the question either by mail or at the Convention?
3. Should we attempt to meet in a central region with a minimum distance from the theoretical center?
4. Should we adhere to our present plan?
5. Should we consider the plan now observed by some of the honoraries by perhaps providing a higher convention fee and to extend subsidies to those who are compelled to travel long distances?

After an exchange of opinions, it was the feeling of the majority of the committee that in the interests of the outlying membership the Convention should not be held regularly in a central area. The committee favored retaining the plan of rotation adopted at the Atlanta Convention in 1927, because it is recognized that there

may be certain years when it will be in the interests of the Association to hold the meeting at a point distant from the traveling center. The committee recommends, however, that emphasis be placed upon Section 2 or Article II of the By-Laws, which makes it clear that the Executive Committee of the Association may in any year for good and sufficient reasons depart from the established plan of rotation.

In the opinion of the committee, it is inadvisable to make any fundamental change in our general plan at this time.

April 13, 1937.

ALAN BRIGHT, *Chairman*

J. R. SAGE

FRED L. KERR

LORENA M. CHURCH

J. R. ROBINSON

EMMA E. DETERS

M. E. GLADFELTER

CARRIE MAE PROBST

J. G. QUICK

REPORT OF THE SECOND VICE-PRESIDENT

A year ago, we had 689 Active members, 10 Honorary members, or a total of 699. During the year, we have added 29 new members and 6 have resigned or were dropped. One has resigned for one year only, showing a net increase of 22. Our total membership at present, including 10 Honorary members, is 711. This is the largest membership we have had in five years.

COMPARATIVE STATEMENT OF MEMBERSHIP OVER FIVE-YEAR PERIOD

	1936-37	1935-36	1934-35	1933-34	1932-33
Active Members	711 ¹	689	661	662	697
Honorary Members	10	10	10	9	8
Total	721	699	671 ²	671	705
Added Since Last Convention	29	42	21	13	29
Resigned or Dropped During Year	6	13	20	44	48
Resigned for One Year Only	1	1	6	3	2
Net Increase or Decrease	+22	+28	-5	-34	-15

¹ Including 9 new members with dues credited to year 1937-38, and 1 old member with dues paid in advance for 1937-38.

² Including 5 new members who paid for 1934-35 in 1933-34, but did not appear in that tabulation.

LORENA M. CHURCH

REPORT OF THE SECRETARY

The Report of the Executive Committee: The Executive Committee held its meeting on April 12 and 14. Business was transacted as follows:

Mr. Ezra L. Gillis, Registrar of the University of Kentucky, was unanimously elected to honorary membership in the Association.

It was voted that a committee of three members be appointed by the president as an appraisal committee to make a constructive report for the guidance of the incoming president in organizing his program.

The committee approved the recommendation made last year by Dr. Mitchell of the Special Projects Committee that institutions not members of the Association be charged \$1.00 for a copy of the report on accredited institutions and \$1.00 a year for each report of revisions.

The sum of \$25.00 was added to the budget of the treasurer because of the increased cost of printing.

The sum of \$213.00 was added to the budget of the editor due to the increased cost of printing.

The committee voted to continue the policy of offering \$25.00 for the best article submitted for publication in the *Bulletin*.

The committee approved the recommendation of the editorial board that the word "Journal" be substituted for "Bulletin" in the title of the quarterly publication of the association, so that the title will read, "Journal of the American Association of Collegiate Registrars."

The Report of the Affiliated Regional Association Conference: The Affiliated Regional Association Conference held its annual meeting Wednesday, April 14. The members present consisted of the Executive Committee of the American Association of Collegiate Registrars and delegates from thirteen regional associations. Mr. Gladfelter, Mr. Dyrness, and Mr. Smith addressed the conference. The discussions were general and informal. It was urged that officers of regional associations send in to the editor copies of their programs, reports of proceedings, and copies of best papers presented. It was pointed out that the regional association offered an opportunity of contacting colleges that are not members of the A.A.C.R. but which ought to become members. The possibility of engaging co-operatively in a nationwide study was discussed.

J. R. ROBINSON, *Secretary*

REPORT OF THE TREASURER

*Statement of Cash Receipts and Disbursements
For the Period June 1, 1936 to May 31, 1937*

Balance—June 1, 1936

Manufacturers & Traders Trust Co.—Checking Account.....	\$ 396.92	
Buffalo Savings Bank—Savings Account.....	3,990.70	\$4,387.62

Receipts

Interest on Savings Account Balances.....	\$ 86.73	
From Membership Dues		
1934-35 (1).....	\$ 5.00	
1935-36 (13).....	65.00	
1936-37 (655).....	3,275.00	
1937-38 (9).....	45.00	3,390.00
Subscriptions to <i>Bulletin</i>	248.13	
Sale of Single Copies of <i>Bulletin</i>	64.80	
Sale of Reports on Accrediting of Educational Institutions.....	36.00	
Sale of Extra Copies of Report on Enrollment and Degrees.....	.40	
Bulletin Advertising.....	129.00	
Receipts from 1937 Convention.....	922.90	
Use of Mailing List for Commercial Purposes....	5.00	4,882.96
		<u>9,270.58</u>

Disbursements

	<i>Budget</i>	<i>Charges Against Budget</i>
President's Office.....	\$ 100.00	\$ 21.88
Second Vice-President's Office.....	25.00	12.00
Secretary's Office.....	50.00	34.24
Treasurer's Office.....	150.00	175.79
Editor's Office.....	2,500.00	2,913.47
Committee on Special Projects.....	500.00	412.94
Conventions (Expense over Income).....	500.00	166.84
Monograph.....	500.00	—
	<u>\$4,325.00</u>	<u>\$3,737.16</u>
Bank Charges—Collection Costs, Exchange, etc.....		24.90
Disbursements covered by 1937 Convention Receipts.....		922.90
		<u>4,684.96</u>
<i>Balance May 31, 1937</i>		<u><u>\$4,585.62</u></u>

Represented by:

Manufacturers & Traders Trust Co.—Checking Account.....	\$ 183.19
Buffalo Savings Bank—Savings Account.....	4,377.43
Editors Petty Cash.....	25.00
	<u>\$4,585.62</u>

Respectfully Submitted,
EMMA E. DETERS, *Treasurer*

AUDITOR'S REPORT

We hereby certify that the foregoing Statement of Receipts and Disbursements of the American Association of Collegiate Registrars for the period June 1, 1936, to May 31, 1937, is in agreement with the books and correctly sets forth the financial transactions for the period and the funds on hand at the end of the period.

MEECH, HARMON, LITTLE & BLACKMORE

Buffalo, New York
June 2, 1937

PRESIDENT SAGE: At this time I wish to take an opportunity to thank all of the committee chairmen, the committee members, the chairmen of sectional meetings, the speakers who have participated in the program, and everyone who has contributed in any way to the discussion and otherwise to the success of this year's Convention.

It is now my very pleasant duty and opportunity to present the the President-elect, Mr. Kerr.

PRESIDENT KERR: Mr. Chairman and fellow members:

It has not been the custom in times past for the President-elect to make any extended speech. You will note that, as the retiring Vice-President, I maneuvered myself this morning into an advantageous position where I was able to manipulate the proceedings and move up the beginning of the business meeting—for what purpose, you may imagine.

Seriously, however, I do not aim to make any address. A number of you have been very kind in your comments to me about my election. I am very deeply conscious of the honor that has been conferred upon me and of the responsibility that has been laid on my shoulders. I am not capable of carrying this alone but I feel confident of the hearty support of the membership of the Association and of the Executive Committee, that they will work with me, and of all of you, upon whom I will most assuredly call for assistance in the work of the Association during the year and for the preparations for our annual meeting next year.

I presume you are all getting anxious to know something about our plans for next year and, in accordance with the custom, I will announce at this time that the meeting next year will begin on April 19, Tuesday, and that the meeting will be held in the City of New Orleans.

CHAIRMAN SAGE: I am very happy to turn the Association over to such an able leader.

Is there any new business or any point that we have overlooked? If not, I shall now declare the 25th Convention adjourned.

ORGANIZATION OF THE ASSOCIATION

OFFICERS, 1936-37

Mr. J. R. Sage, <i>President</i>	Iowa State College
Mr. Fred L. Kerr, <i>Vice-President</i>	University of Arkansas
Miss Lorena M. Church, <i>Second Vice-President</i>	Rockford College
Mr. J. R. Robinson, <i>Secretary</i>	George Peabody College for Teachers
Miss Emma E. Deters, <i>Treasurer</i>	University of Buffalo
Mr. M. E. Gladfelter, <i>Editor</i>	Temple University
Mr. Alan Bright, <i>Ex-President</i>	Carnegie Institute of Technology*

* The above offices including the ex-president constitute the Executive Committee.

STANDING AND SPECIAL COMMITTEES

SPECIAL PROJECTS

Mr. Ira M. Smith, <i>Chairman</i>	University of Michigan
Mr. R. M. West.....	University of Minnesota
Mr. Fred L. Kerr.....	University of Arkansas
Dr. J. P. Mitchell.....	Stanford University
Dr. K. P. R. Neville.....	University of Western Ontario

BOARD OF EDITORS

Mr. M. E. Gladfelter, <i>Editor</i>	Temple University
Mr. W. C. Smyser.....	Miami University
Miss Alma H. Preinkert.....	University of Maryland
Mr. Enoch C. Dyrness.....	Wheaton College
Mr. Roy W. Bixler.....	University of Chicago
Mr. Arthur H. Larson.....	Eastman School of Music
Miss Emma E. Deters.....	University of Buffalo
Mr. R. M. West.....	University of Minnesota
Mr. Wyatt W. Hale.....	Birmingham-Southern College
Mr. Harry M. Showman.....	University of California, Los Angeles

BUDGET

Dr. K. P. R. Neville, <i>Chairman</i>	University of Western Ontario
Mr. Alan Bright.....	Carnegie Institute of Technology
Mr. J. R. Sage.....	Iowa State College

MONOGRAPHS

Mr. Roy W. Bixler, <i>Chairman</i>	University of Chicago
Mr. R. W. West.....	University of Minnesota
Mr. M. E. Gladfelter.....	Temple University

CONVENTION COMMITTEES, 1936-37

LOCAL ARRANGEMENTS AND REGISTRATION

Mr. H. H. Armsby, <i>Chairman</i>	Missouri School of Mines and Metallurgy
Miss Edna Teeter.....	University of Kansas
Miss Mary Ruth Bundy.....	Ottawa University
Rev. J. J. Gibbons.....	Rockhurst College
Mr. C. E. Evans.....	University of Kansas City
Mr. A. J. Moon.....	William Jewell College

INTRODUCTION

Mr. C. P. Steimle, <i>Chairman</i>	Michigan State Normal College
Mr. C. W. Helmstadter.....	Municipal University of Omaha
Miss Katharine George.....	Northwestern University
Mr. George O. Foster.....	University of Kansas
Mr. S. W. Canada.....	University of Missouri

TRANSPORTATION

Mr. John C. McHugh, <i>Chairman</i>	De Paul University
Mr. E. C. Miller.....	University of Chicago
Mr. J. A. Gannett.....	University of Maine
Mr. E. J. Mathews.....	University of Texas
Mr. C. E. Evans.....	University of Kansas City
Mr. H. M. Showman.....	University of California at Los Angeles

OFFICE FORMS AND FILING EQUIPMENT

Mr. H. W. Holter, <i>Chairman</i>	Bucknell University
Mr. D. R. Fitch.....	Denison University
Miss Alma Preinkert.....	University of Maryland
Rev. J. J. Gibbons.....	Rockhurst College
Mr. E. J. Howell.....	Agricultural and Mechanical College of Texas

NOMINATIONS

Mr. E. C. Dyrness, <i>Chairman</i>	Wheaton College
Mrs. Clara D. Hayes.....	Bowdoin College
Mr. J. P. Mitchell.....	Stanford University
Mr. R. F. Thomason.....	University of Tennessee
Mr. R. E. McWhinnie.....	University of Wyoming

RESOLUTIONS

Mr. Arthur H. Larson, <i>Chairman</i>	Eastman School of Music
Miss Florence I. McGahey.....	University of Nebraska
Mr. G. E. Wadsack.....	University of Oklahoma

CONSTITUTION

ARTICLE I—NAME

The name of the organization shall be the American Association of Collegiate Registrars (hereafter referred to as the Association or the A.A.C.R.).

ARTICLE II—PURPOSE

The purpose of this Association shall be to provide, by means of annual conferences and otherwise, for the spread of information on problems of common interest to its members, and to contribute to the advancement of education in America.

ARTICLE III—MEMBERSHIP

Section 1. Active Membership. Any officer charged with the duty of registration, or of passing upon entrance credentials, or of recording the standing of students in any recognized institution of higher learning in the United States or in Canada, shall be eligible to active membership. It is understood that membership is either institutional or personal and that in institutions where there are two or more co-ordinate officers in charge of the duties referred to above, each such officer may become an active member.

Section 2. Associate Membership. Subordinate members of the staff of any officer qualified for active membership may be enroled as associate, non-voting members of the Association.

Section 3. Honorary Membership. Honorary membership may be recommended by any member of the Association to the Executive Committee. Election to honorary membership will rest with the Executive Committee, but only those who continue in some educational work, or who are retiring from active service, and only those who have been in the profession long enough, or who have been sufficiently active in the Association to warrant the assumption that they are interested in the Association's progress will be elected by the Executive Committee.

ARTICLE IV—OFFICERS

Section 1. The officers of the Association shall be a president, a first vice-president, a second vice-president, a secretary, a treasurer, and an editor. All officers shall be elected by ballot at the annual meeting, a majority vote of those present and voting being necessary to elect. With the exception of the treasurer, they shall hold office from the adjournment of the meeting at which they are elected until adjournment of the meeting in which their successors are elected. The treasurer shall hold office from the beginning of the fiscal year following his election until the close of the fiscal year in which his successor is elected.

Section 2. The officers named in Section 1, together with the immediate past president, shall constitute an Executive Committee, with power to fix the time and place of the next annual meeting as provided in the by-laws, to assist the president in arranging the program, and to make other necessary arrangements.

ARTICLE V—AFFILIATED REGIONAL ASSOCIATION CONFERENCE

The Affiliated Regional Association Conference (hereafter referred to as the A.R.A.C.) shall be composed of delegates from affiliated regional associations of registrars. The conference and the executive committee jointly shall have power to co-ordinate the activities of the regional associations and the A.A.C.R.

ARTICLE VI—AMENDMENTS

This constitution may be amended at any annual meeting by a two-thirds vote of the members present and voting, provided that notice of the proposed amendment has been sent to the members at least one month in advance of the meeting. An amendment not thus proposed in advance may be adopted by a four-fifths vote of the members present and voting.

BY-LAWS

ARTICLE I—FEES

Section 1. The annual membership fee for active members shall be \$5.00 and for associate members \$3.00. The fee shall, in both cases, include a subscription to the *Bulletin*.

Section 2. Any member who shall fail to pay annual dues for two consecutive years will, after notice in writing from the treasurer, be dropped automatically from the list of members.

Section 3. There shall be a convention registration fee of two dollars (\$2.00) paid by one representative of each institution represented at the annual convention.

Section 4. There shall be no membership or registration fee for honorary members. Such members shall be given complimentary subscriptions to the *Bulletin*.

ARTICLE II—MEETINGS

Section 1. The Association shall hold an annual meeting in April of each year, the location and date to be chosen by the Executive Committee, which shall also have the power to advance, postpone, or omit an annual meeting in case of emergency.

Section 2. The geographical rotation scheme for the location of meetings, as adopted at the Atlanta convention in 1927, shall be followed; provided, however, that a variation may be made in any year for good and sufficient reason by action of the Executive Committee or by vote of the Association.

ARTICLE III—TERM OF OFFICE AND DUTIES OF OFFICERS

Section 1. The president and two vice-presidents shall hold office for one year each. The term of office for the secretary, treasurer, and editor shall be three years each, one of these officers to be elected each year. Should any annual meeting be omitted (or the time for it changed) the time between two consecutive meetings shall be counted as one year in the administration of the provisions of this section.

Section 2. The president shall assume full responsibility for all the general activities of the Association, conduct all necessary correspondence with the members in regard to the annual program, and, with the assistance of the Executive Committee, arrange the program. All bills must be approved by the president before payment.

Section 3. The first vice-president shall act as the chief assistant of the president, and shall succeed to that office in case it becomes vacant.

Section 4. The second vice-president shall have charge of the campaign for extending the membership of the Association. This officer, together with the president, secretary, and treasurer, shall determine eligibility for membership in the Association. He shall succeed to the presidency in case of a vacancy in both the preceding offices.

Section 5. The secretary shall keep an accurate list of the members of the Association, correcting same from time to time upon the advice of the treasurer. He shall be the custodian of the records of the Association. He shall keep the minutes of the annual meeting and of the meetings of the Executive Committee.

Section 6. In addition to the usual duties of the office, the treasurer shall collect the membership dues and shall report changes in the list of members to the president, second vice-president, secretary and editor. He shall secure the approval of the president on all bills before payment. He shall prepare an informal report to be presented to the members of the Association at the time of the annual meeting. At the close of the fiscal year, he shall make a complete formal report, audited by a certified public accountant, to be presented to the Executive Committee for publication in the next issue of the *Bulletin*. The expense of the audit shall be defrayed by the Association.

Section 7. The editor shall edit, publish, and distribute the *Bulletin* of the Association and any other official publications issued in the name of the Association.

Section 8. The Executive Committee shall have authority between annual meetings to fill any vacancy not otherwise provided for in this article.

ARTICLE IV—REGIONAL ASSOCIATIONS

Section 1. Any group of registrars may form a regional association, with the right to (a) determine its own constitution in accordance with local needs but in every respect consistent with the constitution of the A.A.C.R.; (b) to determine its own boundary lines with due consideration for those of existing regional associations, and to determine its own membership of collegiate institutions or the appropriate officers thereof; (c) to elect its own officers, to conduct its meetings according to regional interests and needs, and to determine its membership fees, number of meetings, etc., except as hereinafter provided.

Section 2. Any regional association of collegiate registrars may become affiliated with the A.A.C.R. on the following terms:

(a) The regional association shall appoint or elect an official delegate, preferably the president or a past president of that association, to the A.A.C.R.

(b) These delegates shall meet once a year with the Executive Committee

of the A.A.C.R. at the time of the annual meeting of the Association to plan jointly a co-ordinated program of activity for the A.A.C.R. and the regional associations.

(c) The regional association shall submit to the editor for publication in the *Bulletin*, subject to his approval, the program and proceedings of its annual meeting and the best papers, studies, or projects presented at each annual or other meeting.

Section 3. If feasible, regional association meetings shall be held annually, but at a time not conflicting with the national meeting.

ARTICLE V—COMMITTEES

Section 1. There shall be a Budget Committee of three members, consisting of the president-elect, the retiring president and the next preceding president. The senior member of the committee in point of service shall act as chairman. Should any of these members be unable to serve, the retiring president shall appoint a substitute.

Section 2. There shall be a standing Committee on Special Projects, of five or more members, appointed by the president, whose duty it shall be to supervise any special projects referred to it by the Association, to co-ordinate so far as possible the activities of the Association and of individual members or groups of members in educational research, and to collect and disseminate information concerning study projects undertaken by various members.

Section 3. There shall be appointed by the president a Nominating Committee of five members whose duty it shall be to select nominees for the several elective offices and report to the Association on the second day of the annual meeting. At this time, opportunity shall be given for additional nominations from the floor.

Section 4. The editorial staff shall consist of the editor and nine associate editors appointed annually by the editor. The editor shall be responsible for the distribution of work among the associate editors.

Section 5. Nothing in this article shall be construed as preventing the appointment of additional standing or special committees deemed necessary for the work of the Association.

ARTICLE VI—FISCAL YEAR

The fiscal year of the Association shall extend from June 1 to May 31.

ARTICLE VII—AMENDMENTS

These by-laws may be amended at any annual meeting by a majority vote of the members present and voting, provided that notice of the proposed amendment has been sent to the members at least one month in advance of the meeting. An amendment not thus proposed in advance may be adopted by a two-thirds vote of the members present and voting.

DELEGATES AND GUESTS IN ATTENDANCE AT THE TWENTY-FIFTH NATIONAL CONVENTION

A

Adcock, Eunice, Asst. Reg., Knox College, Galesburg, Ill.
Alexander, Belle, University of Wisconsin, Madison, Wis.
Allen, Frank M., Registrar, Southern Methodist University, Waco, Tex.
Arden, Wesley, Guest, International Business Machines Corp., New York, N.Y.
Armsby, H. H., Registrar, Missouri School of Mines, Rolla, Mo.
Ashby, W. S., Business Manager, Bowling Green College of Commerce, Bowling Green, Ky.
Ashby, Mrs. W. S., Guest, Bowling Green College of Commerce, Bowling Green, Ky.

B

Baldwin, J. W., Registrar, Wayne University, Detroit, Mich.
Baldwin, R. E., Registrar, Northwest Missouri State Teachers College, Maryville, Mo.
Beard, Helen, Clerk, University of Kansas, Lawrence, Kan.
Bell, W. H., Registrar, Utah State Agricultural College, Logan, Utah
Berdahl, John G., Registrar, Augustana College, Sioux Falls, S.D.
Bergstresser, John L., Asst. Dean, University of Wisconsin, Madison, Wis.
Bickerstaff, T. A., Registrar, University of Mississippi, Oxford, Miss.
Bixler, Roy W., Director of Admissions, University of Chicago, Chicago, Ill.
Bly, John M., Registrar, St. Olaf College, Northfield, Minn.
Boone, Jeanette, Asst. Reg., Sweet Briar College, Sweet Briar, Va.
Brenneman, Elsie, Registrar, Illinois State Normal University, Normal, Ill.
Brewer, R. L., Registrar, Southern Methodist University, Dallas, Tex.
Bright, Alan, Registrar, Carnegie Institute of Technology, Pittsburgh, Pa.
Brown, H. E., W. M. Welch Mfg. Co., Chicago, Ill.
Burgoyne, Helen H., Acting Registrar, University of Cincinnati, Cincinnati, Ohio
Bushman, Ruth L., Asst. Reg., Washington University, St. Louis, Mo.
Butler, Alice L., Registrar, Western College, Oxford, Ohio
Butler, Rev. E. J., Registrar, St. Ambrose College, Davenport, Iowa
Buzby, Dorothy E., Guest, Trinity College, Washington, D.C.

C

Caldwell, H., Registrar, Georgia School of Technology, Atlanta, Ga.
Canada, Evelyn K., (Wife of S. Woodson Canada) University of Missouri, Washington, Mo.
Canada, S. Woodson, Registrar, University of Missouri, Washington, Mo.
Carlson, Karen Louise, Registrar, Carroll College, Waukesha, Wis.
Carter, Asa, Registrar, Bradley Polytechnic Institute, Peoria, Ill.
Chandler, H. W., Registrar, University of Florida, Gainesville, Fla.
Church, Lorena M., Rockford College, Rockford, Ill.
Churchill, Lois M., Registrar, Teachers College of Kansas City, Kansas City, Mo.

Clark, Theron, Registrar, University of Southern California, Los Angeles, Calif.

Clarke, Helen M., Asst. Reg., Ohio State University, Columbus, Ohio

Clement, W. P., Registrar, Texas Technological College, Lubbock, Tex.

Cockin, Edith D., Registrar, Ohio State University, Columbus, Ohio.

Congdon, Wray H., Director of Admissions, Lehigh University, Bethlehem, Pa.

Conger, Allen C., Registrar, Ohio Wesleyan University, Delaware, Ohio

Cope, Frances K., Registrar, Asheville Normal and Teachers College, Asheville, N.C.

Cornwell, W. L., Remington Rand, Inc., Buffalo, N.Y.

Crockett, Ruth, Recorder, University of Kansas, Lawrence, Kan.

D

Dahl, Adeline, Asst. Reg., South Dakota College, Brookings, S.D.

Davidson, Elsie M., Asst. Reg., Wabash College, Crawfordsville, Ind.

Davis, Paul W., Registrar, New Mexico Normal University, Las Vegas, N.M.

Deakings, Clarence E., Registrar, Lawrence College, Appleton, Wis.

Dearden, Anna Mae, Asst. Reg., University of Oklahoma, Norman, Okla.

Deters, Emma E., Registrar, University of Buffalo, Buffalo, N.Y.

Dilley, F. B., Registrar, Ohio University, Athens, Ohio

Doner, D. B., Registrar, South Dakota State College, Brookings, S.D.

Doner, Mrs. D. B., (Wife of above) South Dakota State College, Brookings, S.D.

Dougherty, Estelle, Registrar, Sterling College, Sterling, Kan.

Duffey, Hugh T., Registrar, Duquesne University, Pittsburgh, Pa.

Duffey, Mrs. Hugh T., Guest, Duquesne University, Pittsburgh, Pa.

Duggan, Leo F., Registrar, Michigan College of Mining and Tech., Houghton, Mich.

Dupont, Rev. F. F., Registrar, St. Norbert College, West Depere, Wis.

Dwenger, George H., Registrar, Long Island College of Medicine, Brooklyn, N.Y.

Dyrness, Enock C., Wheaton College, Wheaton, Ill.

E

Elder, Harry E., Registrar, Indiana State Teachers College, Terre Haute, Ind.

Eldridge, H. E., Registrar, Arkansas State College, Jonesboro, Ark.

Emmons, C. W., Registrar, Simpson College, Indianola, Iowa.

Enyart, Martha B., Acting Registrar, Butler University, Indianapolis, Ind.

Evans, C. E., Registrar, University of Kansas City, Kansas City, Mo.

F

Feder, Daniel D., Personnel, University of Iowa, Iowa City, Iowa

Fellows, Dr. J. E., Registrar, Oklahoma City University, Oklahoma City, Okla.

Fichtenbaum, Max, Asst. Reg., University of Texas, Austin, Tex.

Finkbeiner, Thomas, Registrar, North Central College, Naperville, Ill.

Fitch, Donald R., Denison University, Granville, Ohio

Fletcher, Worth A., Registrar, The Municipal University of Wichita, Wichita, Kan.

Fletcher, Mrs. Worth A., The Municipal University of Wichita, Wichita, Kan.

Foster, George O., Registrar, University of Kansas, Lawrence, Kan.

Foster, Mrs. George O., University of Kansas, Lawrence, Kan.

Fricke, Irene L., Washington University, St. Louis, Mo.

G

Gannett, James A., Registrar, University of Maine, Orono, Me.

Gardner, Lucy, Secretary, University of Kentucky, Lexington, Ky.

Gates, W. H., Registrar, Louisiana State University, Baton Rouge, La.

Gehlbach, Dorothy, Registrar, Lindenwood College, St. Charles, Mo.

George, Katherine, Registrar, Northwestern University, Evanston, Ill.

Gibbons, Rev. J. J., Registrar, Rockhurst College, Kansas City, Mo.

Gillia, Ezra L., Registrar, University of Kentucky, Lexington, Ky.

Gladfelter, M. E., Registrar, Temple University, Philadelphia, Pa.

Graham, Iris, Registrar, McMurry College, Abilene, Tex.

Grant, Carolyn R., Guest, Columbia University, New York, N.Y.

Grant, Edward J., Registrar, Columbia University, New York, N.Y.

Grant, Mrs. Edward J., Columbia University, New York, N.Y.

Grossman, D. A., University of Illinois, Urbana, Ill.

Guthridge, L. A., Registrar, Kansas State Teachers College, Pittsburgh, Kan.

H

Haatvedt, R. A., Registrar, Iowa Wesleyan College, Mt. Pleasant, Iowa

Hackman, Mary, Asst. Recorder, University of Kansas, Lawrence, Kan.

Hagemeyer, Frank H., Teachers College, Columbia University, New York, N.Y.

Hale, Wyatt W., Dean and Registrar, Birmingham-Southern College, Birmingham, Ala.

Hale, Mrs. Wyatt W., Guest, Birmingham-Southern College, Birmingham, Ala.

Hall, John P., Registrar, MacAlester College, St. Paul, Minn.

Hamer, Mary L., Guest, University of Nebraska, Lincoln, Neb.

Harell, Helen, Asst., Louisiana State University, Baton Rouge, La.

Hartstock, Florence, Registrar, Nashville Agricultural Normal Institute, Nashville, Tenn.

Hastings, LoVisa, Kansas State College, Manhattan, Kan.

Hayes, Clara D., Secretary, Bowdoin College, Brunswick, Me.

Hayward, E. H., Registrar, Peru State Teachers College, Peru, Ind.

Hayward, Mrs. E. H., Guest, Peru State Teachers College, Peru, Ind.

Helmstadter, C. W., Registrar, Municipal University of Omaha, Omaha, Neb.

Helmstadter, Mrs. C. W., Guest, Municipal University of Omaha, Omaha, Neb.

Hendrick, Virginia, Asst. Reg., Alabama College, Montevallo, Ala.

Hester, Cleo G., (Mrs.) Registrar, Murray State Teachers College, Murray, Ky.

- Hewitt, Edna, Asst. Reg., University of Nebraska, Lincoln, Neb.
 Hickey, R. P., Guest, Rockhurst College, Kansas City, Mo.
 Hitch, A. M., Kemper Military School, Boonville, Mo.
 Hoekje, John D., Registrar, Western State Teachers College, Kalamazoo, Mich.
 Hoff, Esther, Kansas State College, Manhattan, Kan.
 Hogue, Miss Inez, Registrar, Monmouth College, Monmouth, Ill.
 Holter, H. W., Registrar, Bucknell University, Lewisburg, Pa.
 Howell, E. J., Registrar, A. & M. College of Texas, College Station, Tex.
 Howell, Wm. R., Registrar, Washington College, Chestertown, Md.

J

- Jones, Joyce, (Miss) Louisiana State University, Baton Rouge, La.
 Jones, Lester A., Registrar, Oklahoma City University, Oklahoma City, Okla.
 Junker, Fred J., Dean and Registrar, St. Mary's University, San Antonio, Tex.

K

- Kaufman, Agness J., Registrar, Lewis Institute, Chicago, Ill.
 Kelly, W. E., Registrar, Armour Institute of Tech., Chicago, Ill.
 Kelly, Mrs. W. E., Guest, Armour Institute of Tech., Chicago, Ill.
 Kerr, Fred L., Registrar, University of Arkansas, Fayetteville, Ark.
 Kimball, Miss Mary, Kansas State College of Agriculture, Manhattan, Kan.
 King, A. H., Registrar, Kansas Wesleyan, Salina, Kan.
 King, G. E., Registrar, Iowa Wesleyan College, Mt. Pleasant, Iowa
 Kreiter, Florence L., Registrar, Hillsdale College, Hillsdale, Mich.
 Kunter, Veneta J., Registrar, DePauw University, Greencastle, Ind.

L

- Lamke, George W., Registrar, Washington University, St. Louis, Mo.
 Lamke, Mrs. George W., Guest, Washington University, St. Louis, Mo.
 Larson, Arthur H., Secretary, Eastman School of Music, Rochester, N.Y.
 Lawson, Mrs. Mae Beth, Registrar, Eastern New Mexico Junior College, Portales, N.M.
 Lawson, Mrs. T. N., Eastern New Mexico Junior College, Portales, N.M.
 Laymon, Miss Leonore, University of Nebraska, Lincoln, Neb.
 Lea, Ruby E., Registrar, Union College, Lincoln, Neb.
 Lee, Floyd B., Registrar and Dean, Ft. Hays Kansas State College, Ft. Hays, Kan.
 Leo, Brother I., St. Mary's College, Winona, Minn.
 Leshner, C. Zaner, Registrar, University of Arizona, Tucson, Ariz.
 Lewis, Gabe, Acting Reg., John Tarleton Jr. College, Stephenville, Tex.
 Lower, Miss Verna, Registrar, Mt. Union College, Alliance, Ohio
 Lyngby, Genevieve, Registrar, Chicago Musical College, Chicago, Ill.

M

- Machir, Jessie M., Registrar, Kansas State College, Manhattan, Kan.
 MacKinnon, J. C., Mass. Inst. of Tech., Cambridge, Mass.

- MacMorland, Wanda, Registrar, Emmanuel College, Berion Springs, Mich.
 Marston, Frederick, Dean, Kemper Military School, Boonville, Neb.
 Martin, Georgia, Asst. Reg., University of Wisconsin, Madison, Wis.
 Maruth, Charles H., Asst. Reg., State University of Iowa, Iowa City, Iowa
 Mayall, B. H., Registrar, Okla. College of Women, Chickasha, Okla.
 Mayer, W. L., Director of Registrations, North Carolina State College, Raleigh, N.C.
 McCandless, Bethana, Registrar, Grinnell College, Grinnell, Iowa
 McCollough, E. V., Registrar, Tarkio College, Tarkio, Mo.
 McCracken, S. J., Registrar, Colorado State College, Fort Collins, Colo.
 McCune, E. H., Registrar, Southeastern Teachers College, Durant, Okla.
 McElroy, M. Frances, Registrar, National College of Education, Evanston, Ill.
 McGahey, Florence, Registrar, University of Nebraska, Lincoln, Neb.
 McGraw, S. L., Registrar, Concord State Teachers College, Athens, W.Va.
 McKnight, Carrie E., Registrar, Muskingum College, New Concord, Ohio
 McMullen, Laura, Asst. Reg., The Municipal University of Wichita, Wichita, Kan.
 McQuitty, John W., Secretary, Board of Examiners, University of Florida, Gainesville, Fla.
 McWhinnie, R. E., Registrar, University of Wyoming, Laramie, Wyo.
 McWhinnie, Mrs. R. E., Guest, University of Wyoming, Laramie, Wyo.
 Merriman, Curtis, Registrar, University of Wisconsin, Madison, Wis.
 Metcalf, Albert C., Registrar, MacMurray College of Women, Jacksonville, Ill.
 Metcalf, Mrs. A. C., Asst. Reg., MacMurray College of Women, Jacksonville, Ill.
 Millen, Mary Ruth, William Jewell College, Liberty, Mo.
 Mitchell, J. P., Registrar, Stanford University, Stanford, Calif.
 Mitchell, Wm. Roy, Registrar, Missouri Valley College, Marshall, Mo.
 Mitchell, Mrs. W. R., Guest, Missouri Valley College, Marshall, Mo.
 Molony, Rev. Wm. H., Director and Registrar, St. Edwards University, Austin, Tex.
 Moon, Allen J., Dean and Registrar, Wm. Jewell College, Liberty, Mo.
 Morres, Maple, Secretary, University of Kentucky, Lexington, Ky.
 Morrison, Oleva, Acting Reg., Park College, Parkville, Mo.
 Murrell, W. B., Remington Rand, Inc., Kansas City, Mo.
 Murry, C. L., Registrar, Ball State Teachers College, Muncie, Ind.

N

- Nelson, Alfred C., Registrar, University of Denver, Denver, Colo.
 Nock, S. A., Guest, Kansas State College, Manhattan, Kan.
 Norton, DeWitt C., Guest, University of Kansas City, Mo.

O

- Olesen, Ella, University of Idaho, Moscow, Idaho
 Owen, F. T., Registrar, College of Emporia, Emporia, Kan.
 Owen, Mrs. F. T., Guest, College of Emporia, Emporia, Kan.

P

- Parker, W. B., Registrar, Washington University, St. Louis, Mo.
 Pearson, Norma, Registrar, Northern Illinois State Teachers College, DeKalb, Ill.
 Perea, C. H., Registrar, Trinity University, Wachachie, Tex.
 Pettengill, T. E., Asst. Reg., University of Minn., Minneapolis, Minn.
 Pettengill, Mrs. T. E., University of Minn., Minneapolis, Minn.
 Phinney, Gladys, Asst. Reg., Washburn College, Topeka, Kan.
 Pickett, Ethel D., Registrar, Junior College of Kansas City, Kansas City, Mo.
 Pocock, Beulah, Registrar, Friends University, Wichita, Kan.
 Poole, Elma, Registrar, St. Louis University, St. Louis, Mo.
 Poundstone, J., Registrar, Southwestern College, Winfield, Kan.
 Preinkert, Alma, Registrar, University of Maryland, College Park, Md.
 Probst, Carrie Mae, Registrar, Goucher College, Baltimore, Md.

R

- Ramsey, Isabel, Acting Reg., Westminster College, New Wilmington, Pa.
 Reed, T. W., Registrar, University of Georgia, Athens, Ga.
 Reeves, William, Registrar, Phillips University, Enid, Okla.
 Renneker, George, Registrar, University of Dayton, Dayton, Ohio
 Rix, Marshal, Registrar, Sam Houston State Teachers College, Huntsville, Tex.
 Robertson, Mary A., Registrar, University of Alabama, Tuscaloosa, Ala.
 Robinson, Duncan, Registrar, North Texas Agricultural College, Arlington, Tex.
 Robinson, J. R., Registrar, Peabody College for Teachers, Nashville, Tenn.
 Rublee, Mae, Secretary, Univ. of Kansas, Lawrence, Kan.

S

- Sage, J. R., Registrar, Iowa State College, Ames, Iowa
 Sage, Mrs. J. R., Iowa State College, Ames, Iowa
 Sauber, Catherine, University of Minnesota, Minneapolis, Minn.
 Schuepbach, Rose, Asst. Reg., University of Kan., Lawrence, Kan.
 Schuytema, Guy L., Registrar, George Williams College, Chicago, Ill.
 Schmidt, R. H., Registrar, University of Akron, Akron, Ohio
 Schroedel, Edw., International Business Machine Corp., New York, N.Y.
 Seibiorski, Richard, Graduate Student, University of Kentucky, Lexington, Ky.
 Sellen, A. G., Dean, Washburn College, Topeka, Kan.
 Serenius, Dr. C. A., Registrar, Augustana College, Rock Island, Ill.
 Shirley, D. A., Registrar, West Texas State Teachers College, Canyon, Tex.
 Shofstall, W. F., Dean of Admissions, Stephens College, Columbia, Mo.
 Short, Alfred, Arkansas State Teachers College, Conway, Ark.
 Short, Dorothy May, Arkansas State Teachers College, Conway, Ark.
 Short, G. Y., Registrar, Ark. State Teachers College, Conway, Ark.
 Short, Mrs. G. Y., Guest, Ark. State Teachers College, Conway, Ark.
 Sister Ann Elizabeth, Registrar, The Saint Mary College, Leavenworth, Kan.
 Sister Aquinta, Guest, College of St. Catherine, St. Paul, Minn.

- Sister Eucharista, Registrar, College of St. Catherine, St. Paul, Minn.
 Sister Evangeline, Marymount College, Salina, Kan.
 Sister M. Charlotte Holland, Registrar, St. Xavier College, Chicago, Ill.
 Sister M. Evelyn, Sacred Heart Junior College, Wichita, Kan.
 Sister M. Joan, Guest, Rosary College, River Forest, Ill.
 Sister M. Petrona, Registrar, Sacred Heart Junior College, Wichita, Kan.
 Sister M. Wilhelmina, St. Teresa's College, Kansas City, Mo.
 Sister Mary Cosilda, Registrar, Briar Cliff College, Sioux City, Iowa
 Sister Mary Constance, College of St. Mary, Omaha, Neb.
 Sister Mary Ephrem, Asst. Reg., St. Xavier College, Chicago, Ill.
 Sister Mary Eugenia, Registrar, Notre Dame Junior College, St. Louis, Mo.
 Sister Mary Fidelis, Rosary College, River Forest, Illinois
 Sister Mary Finbarr, Dean, Regis College, Weston, Mass.
 Sister Mary Frances Chantal, Registrar, Mount Mary College, Milwaukee, Wis.
 Sister Mary Gonzaga, Registrar, St. Teresa's Junior College, Kansas City, Mo.
 Sister Mary Grace, RSM, Registrar, Our Lady of Cincinnati College, Cincinnati, Ohio
 Sister Mary Jude, Asst. Reg., Sacred Heart Junior College, Wichita, Kan.
 Sister Mary Mark, Dean, College of St. Mary, Omaha, Neb.
 Sister Mary Mildred, Registrar, Regis College, Weston, Mass.
 Sister Mary Nicholas (Arnoldy Reg.) Marymount College, Salina, Kan.
 Sister Mary Robert Hugh, Mundelein College, Chicago, Ill.
 Sister Mary St. Helen, Registrar, Mundelein College, Chicago, Ill.
 Sister Mary Servatius, Briar Cliff College, Sioux City, Iowa
 Sister Mary Virginia, RSM, Guest, Our Lady of Cincinnati College, Cincinnati, Ohio
 Sloniger, Zazel, Registrar, Nebraska Wesleyan University, Lincoln, Neb.
 Smith, C. A., Secretary of Faculty, University of Wisconsin, Madison, Wis.
 Smith, Ira M., Registrar, University of Michigan, Ann Arbor, Mich.
 Sollards, Velna, Asst. Reg., Western Illinois State Teachers College, Macomb, Ill.
 Southwick, Arthur F., The College of Wooster, Wooster, Ohio
 Stanley, Edith, Acting Reg., Oberlin College, Oberlin, Ohio
 Stegall, Ruth, Asst. Reg., Oklahoma Baptist University, Shawnee, Okla.
 Steggert, B. J., Registrar, Loyola University, Chicago, Ill.
 Stephenson, Edythe, Reg., Washington Missionary College, Wash., D.C.
 Steward, Donald H., Central Y.M.C.A. College, Chicago, Ill.

T

- Teeter, Edna, Registrar, University of Kansas, Lawrence, Kan.
 Thomas, Blanch C., Registrar, Eastern Illinois State Teachers, Charleston, Ill.
 Thomason, R. F., Registrar, University of Tennessee, Knoxville, Tenn.
 Todd, Edward J., Carleton College, Northfield, Minn.
 Towner, Milton, Director of Admissions, Lawrence College, Appleton, Wis.
 Tucker, E. W., Kemper Military School, Boonville, Mo.

Turrentine, G. R., Arkansas Polytechnic College, Russellville, Ark.
 Tuttle, G. P., Registrar, University of Illinois, Urbana, Ill.

V

Van Laningham, Mrs. L. W., Northeast Missouri State Teachers, Kirksville, Mo.
 Voss, Hertha, Examiner, Western Illinois State Teachers College, Macomb, Ill.
 Vutterback, Sarah, University of Kentucky, Lexington, Ky.

W

Wadsack, G. E., Registrar, University of Oklahoma, Norman, Okla.
 Wallgren, Samuel A., Dean and Registrar, North Park College, Chicago, Ill.
 Wedel, Peter J., Registrar, Bethel College, Bethel, Kan.
 Weirick, Bessie, Registrar, Beloit College, Beloit, Wis.
 West, R. M., Registrar, University of Minnesota, Minneapolis, Minn.
 West, Mrs. R. M., University of Minn., Minneapolis, Minn.
 Whittemore, L. D., Registrar, Washburn College, Topeka, Kan.
 Wiggins, T. E., Registrar, Eureka College, Eureka, Ill.
 Williams, Marian, Statistician, University of Mich., Ann Arbor, Mich.
 Williams, Nannie Mae, State Teachers College, Fredericksburg, Va.
 Williams, Robert, Asst. Reg., University of Mich., Ann Arbor, Mich.
 Wilson, Jessie, Recording Clerk, University of Kentucky, Lexington, Ky.
 Wilson, Thomas J., Registrar, University of North Carolina, Chapel Hill, N. C.
 Wilson, Vesta, Asst. Reg., University of Kansas City, Kansas City, Mo.

Y

Yakel, Ralph, Registrar, James Millikin University, Decatur, Ill.
 Yakeley, Elida, Registrar, Michigan State College, East Lansing, Mich.
 Yuenger, David A., Asst. Reg., St. Norbert College, West Depere, Wis.

Z

Zimmer, Virginia, Asst. Reg., University of Nebraska, Lincoln, Neb.
 Zollinger, Radiance, Registrar, St. Joseph Junior College, St. Joseph, Mo.

REGISTRATION BY STATES, 1937

Alabama.....	4	Michigan.....	9
Arizona.....	1	Minnesota.....	11
Arkansas.....	7	Mississippi.....	1
California.....	2	Missouri.....	34
Colorado.....	2	Nebraska.....	13
Dist. of Col.....	2	New Mexico.....	3
Florida.....	2	New York.....	10
Georgia.....	2	North Carolina.....	3
Idaho.....	1	Ohio.....	15
Illinois.....	36	Oklahoma.....	8
Indiana.....	5	Pennsylvania.....	7
Iowa.....	11	South Dakota.....	4
Kansas.....	35	Tennessee.....	5
Kentucky.....	9	Texas.....	13
Louisiana.....	3	Utah.....	1
Maine.....	2	Virginia.....	3
Maryland.....	3	Wisconsin.....	13
Massachusetts.....	3	Wyoming.....	2
Total.....		285	

REGISTRATIONS OF MEETINGS

1910-37

Registrations	Year	Place	President
24	1910	Detroit	A. H. Parrott, North Dakota Agricultural College (Chairman)
30	1911	Boston	A. H. Espenshade, Pennsylvania State College (Chairman)
38	1912	Chicago	A. H. Espenshade, Pennsylvania State College
23	1913	Salt Lake City	J. A. Cravens, Indiana University
46	1914	Richmond	E. J. Mathews, University of Texas
55	1915	Ann Arbor	G. O. Foster, University of Kansas
69	1916	New York	Walter Humphries, Massachusetts Institute of Technology
66	1917	Lexington	*F. A. Dickey, Columbia University
106	1919	Chicago	A. W. Tarbell, Carnegie Institute of Technology
107	1920	Washington	E. L. Gillis, University of Kentucky
118	1922	St. Louis	*A. G. Hall, University of Michigan
160	1924	Chicago	J. A. Gannett, University of Maine
105	1925	Boulder	T. J. Wilson, Jr., University of North Carolina
155	1926	Minneapolis	G. P. Tuttle, University of Illinois
214	1927	Atlanta	R. M. West, University of Minnesota
253	1928	Cleveland	Ira M. Smith, University of Michigan

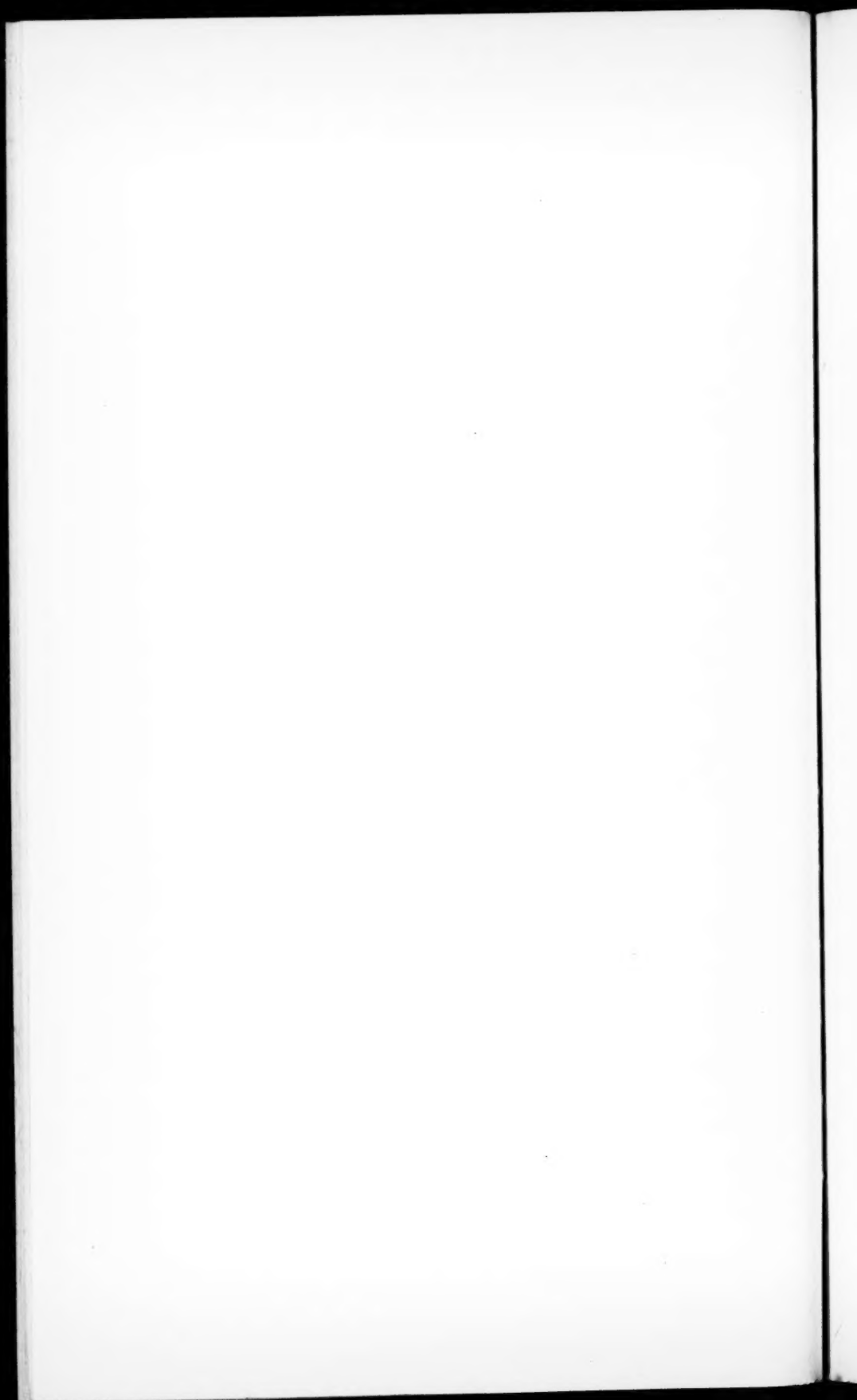
* Deceased.

119	1929	Seattle	C. E. Friley, Agricultural and Mechanical College of Texas
250	1930	Memphis	E. J. Grant, Columbia University
232	1931	Buffalo	J. P. Mitchell, Stanford University
282	1932	Chicago	R. N. Dempster, Johns Hopkins University
266	1933	Chicago	J. G. Quick, University of Pittsburgh
219	1934	Cincinnati	F. O. Holt, University of Wisconsin
235	1935	Raleigh	K. P. R. Neville, University of Western Ontario
309	1936	Detroit	Alan Bright, Carnegie Institute of Technology
285	1937	Kansas City, Mo.	J. R. Sage, Iowa State College

MEMBERSHIP OF THE ASSOCIATION

1914-36

Year	No. of Members	Year	No. of Member
1914	62	1928	622
1915	100	1929	696
1916	123	1930	749
1917	140	1931	754
1919	177	1932	720
1920	194	1933	705
1922	210	1934	671
1924	299	1935	671
1925	331	1936	699
1926	384	1937	722
1927	504		



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VOL. 12 • JULY, 1937 • NO. 4

BULLETIN

OF THE
AMERICAN ASSOCIATION
OF COLLEGIATE REGISTRARS



PUBLISHED BY THE ASSOCIATION

The American Association of Collegiate Registrars

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